SAIC

An Employee-Owned Company

IMPLEMENTATION UPDATE GUIDE

(Supplement to Student Training Materials)

FOR UPDATES FROM CHCS S/W VERSION 4.41 MU1 TO CHCS S/W VERSION 4.5

FOR CLN/DTS

Copyright 1996 SAIC

COMPOSITE HEALTH CARE SYSTEM

Submitted in Response to
Contract DAHC94-88-D-0005, CDRL Item B046

For:

U.S. Army Information Systems Selection & Acquisition Agency
and Composite Health Care System Program Office

By:

Science Applications International Corporation (SAIC)
Health Care Technology Sector (HCTS)
10260 Campus Point Drive, San Diego, CA 92121

==

Reference copyright on title page.

==

LIST OF EFFECTIVE PAGES

o   This document includes the specific pages cited below.

o   The "Date" column indicates the date carried in the
      header of the subject page, thereby identifying the
      current issue of each page in this document.

o   If change pages are issued, insert as specified in the
      change notice. Dispose of superseded pages in
      accordance with applicable regulations.

Date	Page Number
29 Jul 96	Title Page (i) (ii)
29 Jul 96	iii -- xii
29 Jul 96	1-1 -- 1-2
29 Jul 96	2-1 -- 2-4
29 Jul 96	3-1 -- 3-42
29 Jul 96	A-i -- A-ii
29 Jul 96	A-1 -- A-6
29 Jul 96	B-i -- B-iv
29 Jul 96	B-1 -- B-30
29 Jul 96	C-i -- C-ii
29 Jul 96	C-1 -- C-2
29 Jul 96	D-i -- D-ii
29 Jul 96	D-1 -- D-2
29 Jul 96	E-i -- E-ii
29 Jul 96	E-1 -- E-14

29 Jul 96   F-i -- F-ii

29 Jul 96   F-1 -- F-4

29 Jul 96   G-i -- G-ii

29 Jul 96   G-1 -- G-2

              R E C O R D   O F   C H A N G E

This record is maintained throughout the life of the document;
each published update is recorded. A Change Package (re-issue of
changed pages only) carries change bars in the page margins to
identify differences from the preceding issue. Due to the scope
of change that necessitates a Revision (re-issue of entire
document), a Revision does not carry change bars.

ISSUE	DATE	SUMMARY DESCRIPTION	REFERENCE DATA
Draft	22 Apr 96	Initial draft submittal, for CHCS S/W Version 4.5.	CHCS-4.5
Final	29 Jul 96	Final submittal for CHCS CHCS S/W Version 4.51.	CHCS-4.51

This page
has been left blank
intentionally.

TABLE OF CONTENTS

LIST OF APPENDIXES

This page
has been left blank
intentionally.

INTRODUCTION

The Implementation Update Guide (IUG) is a reference manual for the implementation of CHCS Version 4.5. There is an IUG for each functionality. This IUG is applicable to the Clinical and Dietetics subsystems.

The Table of Contents provides an outline of the information contained in this guide. The document is divided into the following sections:

HOW TO USE THIS DOCUMENT - A description of the document and how to use it.

1. SUMMARY OUTLINE - Brief overview of changes - this can be used as a hand-out to all users.

2. SUBSYSTEM CHECKLIST - This is a step by step list of pre and post install implementation activities.

3. CHANGES AND ENHANCEMENTS - a description of each change with subsections including an Overview, Detail of Change, and File and Table Change.

4. APPENDIXES - applicable information pertaining to the implementation of Version 4.5 including Common Files changes and a Master Checklist for all Subsystems.

This page
has been left blank
intentionally.

1. __SUMMARY OUTLINE OF CHANGES.__

1.1 __LAB/RAD ENTRIES ON DUE LIST.__

The Laboratory and Radiology due lists have been revised. Information will now be automatically charted to the Due Lists when a patient is logged into the Radiology Department as "ARRIVED" for an exam. The Lab Due Lists will also now automatically indicate that a collection list sample has been logged into the Laboratory. These system generated entries will also appear on the Shift Care Plan and Consolidated Shift Care Plan. The Lab/Rad Due Lists are generally used only at sites where Clinical inpatient software is activated.

1.2 __MULTIPLE INPATIENT FORMULARIES.__

This Version 4.5 enhancement will allow the Pharmacy to build or establish multiple inpatient formularies, based on policies established by the site. As before, drug pick list information will display based on the settings established for the related formulary group. Prior to Version 4.5, one inpatient formulary had to be shared between multiple inpatient facilities.

1.3 __BLOOD LAB ORDERS.__

An interface between CHCS and Defense Blood Standard System (DBSS) provides the capability for entering blood lab orders into CHCS. An authorized user will now have the capability to enter orders for blood products and related laboratory tests using the existing order entry pathways. The user will also have the ability to enter autologous donation orders (where a patient may donate their own blood for their own future use such as for elective surgery).

1.4 __RX DISPENSING NOTIFICATIONS.__

If the site chooses to activate this option, the Version 4.5 change/enhancement will enable Clinical users to view dispensing information and pharmacy fill activity per RX orders listed on the Patient Order List (POL).

1.5 __LAB DUPLICATE TEST WARNINGS AND PROCESSING PRIORITY CHANGES.__

This change incorporates a Lab duplicate checking parameter which has been expanded from a 24-hour check to a maximum range of 60 days before and after the date/time the order is scheduled. Clinical users will experience a difference in duplicate lab check warnings on some lab orders if this parameter is changed by the Lab.

Also, the parameters for lab test processing priorities will reflect changes as to the highest processing priority allowed for a particular test. The default processing priorities can be defined for each individual test/panel as well.

1.6   ORDER ENTRY LINKED WITH APPOINTMENTS (WAM).

The Workload Assignment Module (WAM) interface on CHCS will gather workload reporting data as Clinical users enter new outpatient orders for a particular Requesting Location. The system will prompt the order entry users to link new orders to scheduled appointments on any outpatients for whom they are entering orders.

1.7   RX MIN/MAX DOSAGE CHECKING FOR MG/ML.

The system can now perform min/max dosage clinical screenings on drug orders with MG or ML measurements. Previous to Version 4.5, dosage checking did not occur if the sig code entries by the Health Care Providers (HCPs) included measurements of MG or ML. Dosage checks, as always, will only occur for drugs if the site's Pharmacy enables this option and sets a minimum and maximum range for a particular drug.

1.8   DIETETIC/MED AND DIETETIC/LAB CHANGES.

The Medications of Interest Report and Abnormal Clinical Chemistries Report will provide information for dietary consultations prior to diet orders being entered into CHCS.

1.9   VERSION 4.5 INTERFACES - PWS/CIW/NMIS.

As a continued effort in Version 4.5, further work has been done to facilitate the communication link between CHCS and two prototype systems being developed - Clinical Integrated Workstation (CIW) and Provider Workstation (PWS). Order information and allergy update information will be exchanged via broadcast and interactive HL7 messages.

Nutrition Management Information Systems (NMIS) will interface with CHCS via HL7 messages each time a diet order is created and activated or when an existing diet order is placed on hold, reactivated from hold, cancelled, or modified.

2. SUBSYSTEM CHECKLIST.

2.1 USER TRAINING.

CLN

Enhancements should be demoed to Clinical POCs. Hands-on training is preferrable, but not essential for CLN users. POCs for the Lab, Radiology and Pharmacy Departments, and any designated Super Users for the clinics/wards would also benefit from attending applicable portions of the demo.

Estimated Time for Demo: 1 - 1.5 hrs.

A demo is also recommended for Clinical users who input LAB/RAD/RX orders. The demo would vary, depending on which options are used at the site. For example: if DBSS is interfaced, the demo would include order entry of blood lab tests; if the PHR Dispensing Option is not activated, this would not be in the demo. Linking order with appointments is applicable to all order entry users, but could be covered with a handout if this is the only change applicable.

Estimated Time for Demo: 1 - 1.5 hrs.

DTS

Dietetics POCs could also receive a brief demo on the DTS changes. A self-guided review using the IUG as a reference could suffice if necessary. This, of course, is only applicable to sites using inpatient functions and the CHCS DTS module.

Another feature associated with the DTS software, which may be demoed, is the Medications of Interest and the Abnormal Clinical Chemistries of Interest reports.

Estimated Time for Demo: 1 hr.

2.2 IMPLEMENTATION ISSUES.

____   **Inpatient Function Only:** Notify the Nurse POC that manual entries for the Lab/Rad due lists will no longer be needed.

____   **Inpatient Function Only:** Notify Clinical users who enter inpatient meds of any changes to their formulary list.

____   **Inpatient Function Only:** Notify Clinical users that their previous order sets may need to be corrected in accordance with the inpatient formulary drug list.

--- **Inpatient Function Only:** If UDKs have been created, Clinical Users might need to edit these UDKs to conform to the parameters of the inaptient formulary drug list.

___ Inform the Clinical users how to enter blood orders and autologous donations into the system. Revise order sets and UDKs post-load that contain any blood orders and replace with new DBSS blood lab orders.

___ Inform users that RX dispensing information is available if Pharmacy utilizes this option at the site.

___ Inform users that e-mail bulletins will be initiated by Pharmacy and sent to ordering provider when patients are non-compliant.

___ Inform Clinical users of any changes to duplicate checking on lab orders if the Lab parameter is changed.

___ Inform Clinical users that orders will have to be linked to patients' appointments if the WAM is initialized. User Defined Keys (UDKs) may need revision since order entry pathway is revised.

___ Inform the Dietetics POC of new reports available through CHCS which provide medication and lab test information. The DTS POC will have to decide on meds and lab tests to incorporate in the lists.

2.3 <u>INTEGRATION ISSUES.</u>

___ CLN/LAB/RAD: If Due Lists are implemented, verify with the Lab POCs that a list of collection samples are being logged and with the Rad POC that patients are logged in as they arrive in Radiology.

___ CLN/LAB: Confirm that the Lab has made the appropriate entries in their files for blood orders and autologous donations. It might be beneficial for them to provide special instructions, if appropriate, to those providers who will be ordering these types of tests.

___ CLN/LAB: Confirm that the Lab has completed/cancelled Collection Lists, Transmittal Lists or Work Documents for pre-Version 4.5 blood tests.

___ CLN/LAB: Lab and Clinical POCs should determine that the Lab parameters are appropriate for duplicate test warnings on lab tests as necessary.

___ CLN/PAS: Confirm that the WAM is functional. Discuss with the PAS and CLN POCs the importance of scheduling

appointments correctly for provider appointment link in ordering and workload data.

____ CLN/PHR: Determine if Providers enter inpatient medication orders. Verify with the Pharmacy POC that the appropriate inpatient divisions are associated with correct inpatient formularies.

____ CLN/PHR: Determine if the Pharmacy will activate the dispensing notification option. If they are, then the Pharmacy POC may notify Clinical POCs of this feature. Inform providers of non-compliance mail bulletin feature as well.

____ CLN/PHR: Confirm that Pharmacy has enabled the Min/Max Dosage Check and, if so, for which drugs. Notify Clinical users of any changes to screening. CLN and PHR may need to work together on making new default sig codes with MG and ML units for some drugs.

____ DTS/LAB: Inform the DTS/LAB POCs of the Abnormal Clinical Chemistries of Interest Report which will identify lab tests of interest to be used for dietary consultations.

____ DTS/PAD: If NMIS is interfaced with CHCS, notify PAD/DTS POCs of demographics information sent to NMIS from CHCS.

____ DTS/PHR: Inform DTS POC of the capability to identify medications of interest for dietary consultations.

____ PWS/CIW INTERFACES: If these system interfaces are in place at sites, the site will be able to gather workload reporting data based on inputs into CHCS.

2.4 **FILE AND TABLE CHANGES.**

There is no CLN file/table build for Version 4.5.

2.5 **SECURITY KEYS.**

There are no new security keys in Version 4.5 for CLN.

This page
has been left blank
intentionally.

3. <u>CHANGES AND ENHANCEMENTS.</u>

3.1 <u>LAB/RAD ENTRIES ON DUE LIST.</u>

3.1.1 <u>Overview of Change.</u>

The Laboratory and Radiology due lists have been revised. Information will now be automatically charted to the Due Lists when a patient is logged into the Radiology Department as "ARRIVED" for an exam. The Lab Due Lists will also now automatically indicate that a collection list sample has been logged into the Laboratory as "LAB LOGGED IN." These system generated entries will also appear on the Shift Care Plan and Consolidated Shift Care Plan. The Lab/Rad Due Lists are generally used only at sites where Clinical inpatient software is activated.

3.1.2 <u>Detail of Change.</u>

3.1.2.1 <u>Lab Due List.</u>

Prior to Version 4.5, Lab Due List results were entered by a Clinical user to indicate a lab collection sample had been logged. This resulted in performing dual entry, once in the Lab and the other in the Due List. In Version 4.5, the Lab Due List result will be automatically appended to the Due List to reflect the status of the lab test when the collection sample(s) is logged by Lab. Nurses or any other clinical users who normally enter Lab Collect Due List results are no longer responsible to chart these entries.

When a collection list sample is logged into the laboratory, the system captures as well as charts the date and time the sample was logged in the Laboratory department including the initials of the individual who logged-in the sample.

When a collection list sample is logged into the Lab, the system will chart the stored, standard comment,"LAB LOGGED-IN" on the Due List.

Below is a screen example of how a Lab result will appear on a
Laboratory Due List:

SAMPLE SCREEN

```
                             Lab Due List

LOCATION: OB/GYN                           FROM: 14 Feb 1995
PRINT DATE: 15 Mar 1995@0732               TO: 15 Feb 1995@1459
-----------------------------------------------------------------
14 Feb 1995
 A-5 SMITH,TERESA   [NO11] 20/441-27-7242  REG#
        1. HCT~LAB COLLECT.......................  JAS 14@0932
                                       LAB LOGGED-IN

                          End of Report
              Personal Data - Privacy Act of 1974 (PL-93-579)
=====================================================================
20/441-27-7242   SMITH,TERESA            Reg #: UNK Loc: OB/GYN
                 04 Sep 1945   M
                 [NO11]
```

If a collection list accession is cancelled before the sample is
logged into the Lab, the system will update the due list with the
comment, "LAB CANCELLED: [canned comment]" and cannot be
re-charted in EDR because the task/order is cancelled. Nurses,
or any other Clinical users who normally enter Due List lab
results are no longer required to make these entries.

3.1.2.2 Radiology Due List.

Prior to the installation of Version 4.5, the Clinical user
assigned to enter Rad Due List results had to obtain the
information as to the check-in status of a patient. In Version
4.5, the Radiology Due List will be automatically updated to
reflect checkin entries made for a patient in Radiology.

When a patient arrives, the Radiology department logs in their
arrival. The system stores the date and time the patient was
arrived, and the initials of the Radiology staff member who
arrived the patient for the exam. The Radiology Due List is then
updated with this information. The system will automatically
chart "ARRIVED IN RAD" including the initials and date/time. The
Due List task status will be updated to "CHARTED".

If a patient has been incorrectly selected as having arrived in
the radiology department, the Due List will record "NOT DONE
ARRIVAL ERROR." The task is available to be re-charted, either
automatically when the patient is arrived or by nursing personnel
via the EDR option.

The following is a screen example for printing a Radiology result on a Radiology Due List:

SAMPLE SCREEN

```
                              Rad Due List

LOCATION: OB/GYN                        FROM: 14 Feb 1995
PRINT DATE: 15 Mar 1995@0732              TO: 15 Feb 1995@1459
---------------------------------------------------------------

14 Feb 1995
 A-5 SMITH,TERESA   [NO11] 20/441-27-7242  REG#
        1. CHEST, AP MAIN RADIOLOGY (A)~AMB .......  BWS 14@1436
                                        ARRIVED IN RAD

                           End of Report
                 Personal Data - Privacy Act of 1974 (PL-93-579)
===================================================================
20/441-27-7242   SMITH,TERESA              Reg #: UNK Loc: OB/GYN
                 04 Sep 1945   M
                 [NO11]
```

3.1.3 **File and Table Change.**

No Clinical file and table changes are required for this enhancement.

3.1.4 **Implementation Issues.**

The Version 4.5 enhancement will affect those sites which could be using the nursing functions for the Lab/Rad Due Lists, but don't necessarily have clinically active wards. The Nursing staff will need to be informed that they no longer have to manually enter status of lab collection samples or the arrival of a patient in Radiology. Lab orders with a collection method of "send patient to lab" and "ward collect" will, however, still require charting.

At the time that the benefits of doing away with these manual entries are being explained, they will need to be shown how this information will appear on the Due Lists once the entries have been made in the Laboratory and Radiology.

3.2 **MULTIPLE INPATIENT FORMULARIES.**

3.2.1 **Overview of Change.**

This Version 4.5 enhancement will allow the Pharmacy to build or establish multiple inpatient formularies, based on policies established by the site. As before, drug pick list information

will display based on the settings established for the related
formulary group. Prior to Version 4.5, one inpatient formulary
had to be shared between multiple inpatient facilities.

3.2.2 **Detail of Change.**

Through the Pharmacy parameters, one active Inpatient formulary
group may be associated with an Inpatient Division. Typically,
each inpatient division would be assigned a separate inpatient
formulary; however, more than one Inpatient division may be
assigned to one Inpatient formulary group.

The HCP may enter an inpatient medication order, if desired, for
a drug that is on the formulary picklist. In essence, the changes
are largely transparent to the clinical users.

3.2.2.1 **Drug Pick List.**

Drug pick list information will display as it did prior to
Version 4.5, based on the Pharmacy settings established for the
related formulary group. For example, in order entry, drugs will
appear on the order picklist as ** NOT STOCKED at Dispensing
Pharmacy **, if they are non-formulary or inactive for the
Inpatient division associated with a patient's location.

3.2.2.2 **Order Sets.**

Order sets containing MED and IV orders (whether created prior to
Version 4.5 or after) will be screened against the Formulary
Group parameters associated with patient's location. A message
will display indicating that a drug (or drugs) are not stocked at
the dispensing pharmacy if it's no longer available on the new
formulary. The Clinical user will have the option of whether or
not to continue processing the order.

3.2.2.3 **Formulary Options.**

In a case where it is not straight-forward which Inpatient
formulary group should be used, such as IV orders written for an
Outpatient requesting location, the system uses the following
logic to find the "most correct" Inpatient formulary group for
the order using this algorithm:

   a.   If an order is written for a patient on an Inpatient
        page, the system will use the formulary group for the
        Inpatient division associated with the page.

b.   If the order is on an Outpatient page, the system will:

1.   Check the division of the requesting location - if it is an Inpatient division, the system will use the Inpatient formulary group associated with the Inpatient division.

2.   If it is an Outpatient division - the system will check the Designated Inpatient Facility defined for the division and use the associated Inpatient Formulary group.

3.   If the system can't find an Inpatient division (using the logic listed above) - the system will use the default formulary group. The default formulary group, being the active Inpatient formulary group at the time of the conversion or the first active Inpatient formulary group in the formulary file if the original default is no longer active.

3.2.3 **File and Table Change.**

There are no requirements for file and table changes for the Clinical subsystem.

3.2.4 **Implementation Issues.**

It is the responsibility of the Pharmacy to ensure that their systems files have been updated to reflect the appropriate formularies with the respective inpatient divisions within the Overlapping Catchment Area (OCA).

It is recommended a site policy be established for procedures when the HCPs see '** NOT STOCKED at Dispensing Pharmacy **' in a drug picklist. If the drug is in another inpatient pharmacy within the OCA, the system allows the drug order to be entered even though the Pharmacy may not be able to fill the order.

Clinical users need to be informed that any MED/IV order sets created prior to Version 4.5 will need to be checked to make sure that parameters such as the duration for an IV reflects what is in the Formulary. Prior to Version 4.5, screening was based on the IV location group or settings in the drug file.

3.3 **LAB BLOOD ORDER ENTRY (DBSS).**

3.3.1 **Overview of Change.**

An interface between CHCS and DBSS provides the capability for entering blood lab orders into CHCS.

Authorized CHCS users will now be able to enter orders for blood products and related laboratory tests into CHCS using the existing order entry process. The Clinical user will also have the capability to enter an autologous donation LAB order.

3.3.2 **Detail of Change.**

3.3.2.1 **Blood Lab Order Entry and Result/Status Process Flow.**

A lab order for blood products may be entered using the full-screen method only. Order entry, order sets, scratch pad and macro methods are utilized in the same manner as other lab orders. Once the order is activated it will be accessioned by the Lab as in versions prior to Version 4.5. Blood lab tests include but are not limited to type and crossmatch, type and screen, direct COOMBS, and antibody identification. When a blood bank order is accessioned on CHCS, the order will be downloaded to DBSS via an HL7 message. CHCS will provide all existing order actions such as cancel or modify, for blood orders.

The following lab blood bank tests may be ordered:

TYPE AND SCREEN	(ABO/Rh, Antibody Screen, Antibody Titer ABS pos; Blood Product and # of units requested specified)
TYPE AND CROSS	(ABO/Rh, Antibody Screen, Antibody Titer if ABS pos; Blood Product and # of units requested specified)
PRENATAL SCREEN	(ABO/Rh, Antibody Screen, Antibody Titer if ABS pos, Direct Antiglobulin Test)

ABO/RH
ANTIBODY SCREEN
ANTIBODY SCREEN PANEL
DIRECT ANTIGLOBULIN TEST
ANTIBODY TITER
AUTOLOGOUS DONATION

As with any lab order, when a blood order is modified, a new order will be created and the old order will be canceled. The old order is never deleted from the data base.

After an order has been accessioned, the order cannot be changed by the Clinical user. It may be changed through the Lab system.

CHCS will accept from DBSS any changes in the order's status. If either side of the CHCS/DBSS interface is down, the HL7 messages will be held for later transmission.

CHCS will provide patient results to CHCS users through reporting and inquiry options. HL7 messages will be triggered and sent to DBSS as a result of lab orders, patient update, patient merge and master files notifications.

3.3.2.2 Blood Lab Order Entry Work Flow.

Authorized Clinical users may enter lab orders for blood products and related laboratory tests into CHCS using the existing order entry pathways. The user will also have the ability to enter, an autologous donation lab order. The user will have the ability to add these lab orders to order sets and to scratchpad (an inpatient function).

Lab orders for blood products may be entered using the full-screen Order Entry method only. Note that when ordering a TYPE AND CROSS lab test, the outcome will be to identify whether the patient is Blood Type A or AB or O, etc. The result of a TYPE AND SCREEN lab test order would be to determine the pH factor. The following represents the first screen of the order entry process for a TYPE AND CROSS lab order. The following is a sample screen:

SAMPLE SCREEN

CHOOSE DEFAULTS, or Press Return for Full Screen Entry (required for Anatomic Pathology, Blood Bank, and all Continuous lab tests.)

DATE/TIME OF TEST (NOW, AM, QAM or Date&Time): [**Note:** User must press return here to access full screen order entry]

```
Select LABORATORY TEST: TYPE
      1   TYPE AND CROSS
      2   TYPE AND SCREEN
Choose 1-2:  1  TYPE AND CROSS
```

Once the specific type of test has been entered, the following
screen will display:

SAMPLE SCREEN

```
SMITH,JOHN          Age:38         30/011-12-1234      Laboratory Order
TYPE AND CROSS      BLOOD          Pt/034-82-6509        950324-00001
======================================================================
 Date/Time Needed:          26 Mar 1995@1200
 Start Date/Time:           24 Mar 1995@1200
 Collection Method:         WARD/CLINIC COLLECT & DELIVERY
 Collection Priority:       ROUTINE
 Processing Priority:       ROUTINE
 Special Instructions:

 Product Type (Maximum of 1)                 Units  Total Volume (ml)
 ------------                                -----  -----------------
 RED BLOOD CELLS                               4

Substitute Product Allowed?:  NO
"NO" = HCP will be contacted by phone if substitution is needed.

Reason for Transfusion/Diagnosis/Procedure:

Help = HELP              Exit = F10          File/Exit = DO
```

The patient's SSN will be retrieved from the Patient file and
displayed under the sponsor's SSN in the screen header. A "Pt"
will precede the patient's SSN, i.e., Pt/034-82-6509.

If an order is entered with a future Date/Time Needed, the
Start/Date Time defaults to 48 hrs prior to that time. The
Date/Time Needed is the time the patient is due to come to the
Lab. Orders that are modified will retain the future date/time.
If the Start Date/Time is in the past when it is modified, both
times will default to T@NOW.

Only one product type is allowed for a Type and Cross or Type and
Screen.

The message shown in Screen #2 above will display when "NO" is
entered. The default answer will be "NO". If the Clinical user
overrides the default and answers "YES", the following message
will appear:

      Substitute Product Allowed?: YES
      "YES" = Substitution will be made without contacting HCP.

If a "??" or " HELP" is entered in this field, both messages will
display as help text.

The Reason for Transfusion/Diagnosis/Procedure field will be a
free text, limited to 60 characters. It is a required field.

The following screen is the next screen in the sequence of the above TYPE AND CROSS order. The user will be taken to this screen upon completion of Screen #2:

SAMPLE SCREEN

```
SMITH,JOHN        Age:38    30/011-12-1234        Laboratory Order
TYPE AND CROSS    BLOOD     Pt/034-82-6509        950324-00001
 =================================================================

Hospital Location of Transfusion/Procedure:

History of Transfusion?:          YES          Date: 14 May 1988
History of Antibody Formation?:
History of Transfusion Reaction?:

Previous/Current Pregnancy?:                    Date:
Prior RHIG treatment?:                          Date:
Hemolytic Disease of Newborn?:

Help = HELP              Exit = F10          File/Exit = DO
```

The Hospital Location of Transfusion/Procedure field is a required field that will accept an entry from the Hospital Location file.

For a male patient, after the History of Transfusion Reaction field is completed or left blank (if the information is unknown), the user may bypass the remaining fields and file the order.

The user will have the ability to add these LAB orders to Order Sets and to Scratchpad. Orders created for an Order Set, or through Scratchpad will display as follows for a TYPE AND CROSS:

SAMPLE SCREEN

```
Order Set                                  Laboratory Order
TYPE AND CROSS      BLOOD
 =================================================================
Collection Method:
Collection Priority:
Processing Priority:
Special Instructions:

Hospital Location of Transfusion/Procedure:

Product Type                       Units  Total Volume (ml)
------------                       -----  -----------------


Substitute Product Allowed?: NO
"NO" = HCP will be contacted by phone if substitution needed.

Help = HELP              Exit = F10          File/Exit = DO
```

Once entered, a LAB order for a TYPE AND CROSS will display on
the POL in the following manner:

SAMPLE SCREEN

```
SMITH,JOHN          Age:38      30/011-12-1234         OUTPAT POL

------------------------------------------------------------------
  1 LAB   TYPE AND CROSSMATCH~LAB COLLECT~WHOLE BLOOD~
          4 UNITS on 24 Mar 1995@1600 {Needle
          Precautions}............................ KAYEL 24MAR@1500
```

NOTE: A Type and Screen order will use the same format as a Type
and Cross order and will include a product type.

The following screen represents the entry process for an
autologous donation:

SAMPLE SCREEN

Select LABORATORY TEST: AUTO   AUTOLOGOUS DONATION

```
SMITH,JOHN          Age:38      30/011-12-1234      Laboratory Order
AUTOLOGOUS DONATION             Pt/034-82-6509      950310-0003
 ==================================================================
Date/Time Needed:  12 Jun 1995@0630
Start Date/Time:   22 May 1995@1300

Reason for Transfusion/Diagnosis/Procedure:

Location of Intended Transfusion/Procedure (free text):

Product Type                                             Units
 WHOLE BLOOD                                             2
 PACKED RED CELLS                                        1

Help = HELP            Exit = F10           File/Exit = DO
```

The DBSS system can only accept a maximum of four product types
for Autologous donation.

An HL7 message will be transmitted to the DBSS system when the
specimen for the above TYPE AND CROSS order is accessioned in the
Laboratory. An HL7 message is also sent if the accessioned order
is either modified or canceled by the laboratory personnel.

3.3.2.3 Modifying a Type and Screen to a Type and Cross

When a Clinical user enters a TYPE AND SCREEN lab order, it is a
DBSS practice, in certain cases, to modify a type and Screen (TS)
to a Type and Cross (TC). This is done using the MAO option

specific to the Lab menu. NOTE: A Clinical user may modify the
TS order itself, but does not have the capability to modify it so
that the TS order is actually changed to a TC lab order.

If the ordering HCP requests the Lab to modify the TYPE AND
SCREEN lab order to a TYPE AND CROSS, the following will occur:

o   All attributes of the TS order will be transferred to the
       new TC order such as Req. Loc., HCP, Collection Method,
       Collection Priority, Processing Priority, etc.

o   The accessioned TS may have associated results which will be
       attributed to the new TC order.

o   At the time the TS order is modified to a TC lab order, the
       TS order will be discontinued and a new TC order will be
       generated.

Additionally, a TS can be modified to a TC if the antibody screen
is positive.

Whether the request is from the ordering HCP (O) or an antibody
screen is positive (A), an HL7 BLOOD ACCESSION message to DBSS
will be triggered and the answer will be stored in the status
change history of the TC. This status change history may be
accessed upon expanding the TC order using the F9 key.

Status change history will display as follows:

SCREEN 1

```
--------------------------------------------------------------------------
DBSS,NEW            Age:21    20/526-00-3333        SINGLE ORDER PRINT
--------------------------------------------------------------------------
LAB ORDER
_____
960521-00232
 TYPE AND SCREEN~SEND PATIENT TO LAB~WHOLE BLOOD~1 unit(s)  on 21 May
   1996@1647
THIS IS WHERE SPECIAL IN

Status Change History
Change/Date    User   HCP    | SIGN        DATE      | CSIGN       DATE
Modified TYPE AND SCREEN due to TCA
21May96@1647   LABUSR STANC   |                      |
```

END SCREEN 1

The LAB status will display:

SCREEN 2

```
DBSS,NEW                      20/526-00-3333     F/21        Reg #:
Ph:                                              Military Unit:
--------------------------------------------------------------------------
960521 BBB 441             Col: 21May96@1600         BLOOD(SERUM)
                          Hcp: STANISH,CATHERINE     Req Loc: 10B
Order comment: THIS IS A MODIFIED SPECIAL INSTRUCTIONS
Modify comment: MODIFYING THIS ORDER TO A TYPE AND CROSS
TYPE AND. . . .   PENDING
```

L=Low H=High *=Critical /A=Amended R=Resist. S=Susc. MS=Mod Susc.
Press <RETURN>

END SCREEN 2

Below is how the screen will appear when using RCR (Review Clinical Results and
choosing the option LAB (Patient Lab Inquiry) for a TS modified to a TC:

SCREEN 3

```
                          PATIENT LABORATORY INQUIRY
DBSS,NEW                    20/526-00-3333 F/21  Reg#: 91        817-202-3344
Search by Order date       21 May 96 - 21 May 96        Display by Date
--------------------------------------------------------------------------

  Accession          Test      Status      Req HCP         ReqLoc Order Number
  960521 BBP 441     TYPE/SCR DISCONTINUE STANISH,CATHERIN 10B    960521-00227
  960521 BBP 441     TYPE/CRS PENDING     STANISH,CATHERIN 10B    960521-00232




newInquiry  Mark   pgDn   pgUp   Go    eXit    Help
Go and show results for marked tests
```

END SCREEN 3

At the time a TS is modified to a TC, the following will hold
true:

o The nursing due lists will work as they currently function
   when an order is modified through MAO.

o When the Lab user modifies a TS to a TC, the TS will be
   discontinued and a new TC will be created.

o Two HL7 messages will be triggered from order entry.

o The new TC will not be modifiable in order entry.

o The new TC will require a physician's signature.

Order entry will support the procedure name change from a TYPE
AND SCREEN to a TYPE AND CROSS order. After the Lab user has
modified the TS to a TC the POL will display as follows:

SCREEN 4

```
DBSS,NEW              Age:21            20/526-00-3333              10B (ALL)
_____
    1 ADT   ADMISSION~DIRECT TO MILITARY MTF FROM OTHER
            THAN ER on 21 May 1996@1230 TO BOOMER
            ~COMPLETED   . . . . . . . . . . . . . . . BOOMER  21May@1231

    2 LAB   TYPE AND CROSS~SEND PATIENT TO LAB~WHOLE
            BLOOD~1 unit(s)  on 21 May 1996@1647 {THIS
            IS WHERE SPECIAL INSTRUCTIONS DISPLAY} (m-1) STANC   21May@1647
    3 LAB   TYPE AND SCREEN~SEND PATIENT TO LAB~WHOLE
```

```
        BLOOD~1 unit(s)  on 21 May 1996@1644 {THIS
        IS A SEND PT TO LAB}
         CANCELLED  . . . . . . . . . . . . . . . . STANC   21May@1644
```
_____
```
  OUTPAT      *BM*
```
ACTION:
END SCREEN 4

The TYPE AND SCREEN, in the above example, has been discontinued
and a new TYPE AND CROSS has been created.

The TYPE AND SCREEN will be cancelled due to modification. This
status will display on the expanded order, along with the lab
user's provider ID, the HCP that ordered the original TYPE AND
SCREEN, and the date/time of the modification. The order will
display 's' for signature if the original order has not been
signed. The status cancelling the order will not require
signing.

The new TYPE AND CROSS is designated with an (m-1) to indicate a
status change. This order will require signing. The status
change history will reflect either a status 'Modified TYPE AND
SCREEN due to TCA' or 'Modified TYPE AND SCREEN due to TCO'.
This status change will not require signing as it is more for
informational purposes.

SCREEN 5

```
DBSS,NEW             Age:21    20/526-00-3333       SINGLE ORDER PRINT
```
_____
```
LAB ORDER
_____
960521-00232   Original Order: 960521-00231
LAB   TYPE AND CROSS~SEND PATIENT TO LAB~WHOLE BLOOD~1 unit(s)  on 21 May
    1996@1647
SEND PATIENT TO LAB
THIS IS WHERE SPECIAL INSTRUCTIONS DISPLAY
Date/time needed for transfusion: 21 May 1996 1647

Patient: DBSS,NEW              Requesting Location: 10B
Priority: ROUTINE Start: 21 May 1996 1647 Stop: 21 May 1997 1646
Status  : ACTIVE   (SIGNATURE ABSENT  )

Ordered by: STANISH,CATHERINE  Origin: HCP
Entered by: LAB,USER             Time: 21 May 1996 1644

Signatures:
Press <Return> to continue or '^' to stop:
```
END SCREEN 5

3.3.3 <u>File and Table Changes.</u>

This is a bi-directional interface between CHCS and DBSS and, as
such, will not require file and table changes for the Clinical
subsystem.

3.3.4 Implementation Issues.

Before notifying the Clinical Physician's POC, verify with the Lab, whether the interface between CHCS and DBSS is operational at the site. Once confirmed, inform the Physician's POC that ordering providers will now have the capability to enter blood lab orders and autologous donations into CHCS.

Verify that the Hospital Location file contains the Transfusion/ Procedure entry. This will enable ordering providers to complete the required field 'TRANSFUSION/PROCEDURE while ordering blood lab tests.

Inform Clinical users that blood lab test and autologous donation orders can be entered as part of an order set.

Inform Clinical users that order Sets will need to be edited to remove any and all Blood Bank types of tests used previous to the load, and then add the new DBSS Blood Bank tests.

3.4 RX DISPENSING NOTIFICATIONS.

3.4.1 Overview of Change.

If the site chooses to activate this option, the Version 4.5 change/enhancement will enable Clinical users to view dispensing information and pharmacy fill activity per RX orders listed on the POL. HCPs will also be informed by Pharmacy of any non-compliant patients via e-mail bulletins.

The Pharmacy will be able to choose whether or not to enable the dispensing information option. Prior to Version 4.5 this information was only available if the Clinical user expanded the RX order if the Pharmacy filled it in (i.e., Not Dispensed).

3.4.2 Detail of Change.

3.4.2.1 Dispensing Messages on the POL.

A message on the POL will display available dispensing information for the RX. The message displayed will tell the user whether or not an RX has been dispensed. There are two possible dispensing messages which will be displayed on the POL:

    1. Not Dispensed
    2. Last Dispensed 21Jun01.

The first dispensing message listed above is the "Not Dispensed" message. This message will be displayed if the Dispensing option is enabled and the RX has not been dispensed.

The second dispensing message listed above is "Last Dispensed
21Jun01". This message will be displayed if the Dispensing
option is enabled and the RX has been dispensed since the date
the option was enabled.

The screen below shows how the dispensing messages will be
displayed once the user accesses the POL. As prior to Version
4.5, "DPOL" may be entered at the "ACTION:" prompt to display the
active orders for that patient. To set up display preferences as
a default, the Clinical user may enter "USR" at the "ACTION:"
prompt and complete the fields with "ALL" at the Inpatient orders
and outpatient orders fields.

The first order in the screen below shows how the system will
display the "Not Dispensed" message on the POL for an RX which
has not been dispensed. The second order shown below shows how
the system will display the "Last Dispensed 01Jun01" message on
the POL for an RX which has been dispensed. The third order shown
below shows how the system will display an RX order if the site
does not activate the Dispensing Notification Message option so
no dispensing information is available in the system.

SAMPLE SCREEN

```
EDDY,JON          Age: 38       20/442-27-7242    OUTPT CANCEL ORDERS

1 RX PROPRANOLOL--PO 10MG ~T1 TAB PO BID F5D
     RFO #10 DS5 on 25 Mar 1995@0937 (Not
     Dispensed)  . . . . . . . . . . . . . . . . SMITJ  25MAR@0937
2 RX LASIX--PO 40MG ~T1 TAB PO Q6H F21D
     RFO #1 DS5 on 25 Mar 1995@0937 (Last
     Dispensed 26Mar95)  . . . . . . . . . . . . SMITJ  25MAR@0937
3 RX VITAMINS, MULTIPLE--PO TAB ~T1 PO QD RF1
     #30 DS5 on 25 Mar 1995@0938  . . . . . . . . SMITJ  25MAR@0938  4 RX ASA--PO
325MG TAB ~T1 TAB QID FP RF1 #1
     DS5 on 25 Mar 1995@1142 (Order has changed:
     Expand to view) . . . . . . . . . . . . . . SMITH  25MAR@0938
------------------------------------------------------------------
*OUTPAT*   SICU
------------------------------------------------------------------

ACTION:
```

3.4.2.2 Order has Changed Message on the POL.

If an RX order has been modified, renewed, or reactivated and the
new RX has not been dispensed, the system will display the
message, "Order has changed: Expand to view". The fourth order
in the above Sample Screen shows how the system will display the
message, "Order has changed: Expand to view".

As previous to Version 4.5, when an RX order is modified,
renewed, or reactivated, the system cancels the previous order
and creates a new one. The user can expand the order using the

F9 key. The user can then view additional RX information and see the previous order number. For example, the user could expand the fourth RX order for aspirin shown in above Sample Screen.

After the user expands the order, additional order information is displayed including the current and original order number. Additionally, the Pharmacy Fill Activity is displayed. As shown below in the Sample Screen, the Pharmacy Fill Activity shows that action for this RX is "Original Fill". (This RX has been filled but has not yet been dispensed.

SAMPLE SCREEN

```
RX ORDER
--------

950229-00083   Original order: 950228-00082
RX ASA--PO 325MG TAB ~T2 TAB QID FP RF1 #1 DS5 on 25 Mar 1995@0938

Patient: EDDY,JON                 Requesting Location: SICU
Priority: ROUTINE    Start: 25 Mar 1995 Stop: 14 Apr 1995
Status: ACTIVE       (Signed)

Ordered by: SMITH,JOHN            Origin: HCP
Entered by: SMITH,JOHN              Time: 25 Mar 1995 0938

Signatures:

     HCP: SMITH,JOHN              25 Mar 1995 0938


Fill Activity for RX: A10414

                                      Refills Fill Date
 Action           Pharmacy          Remaining
 ---------------------------------------------------------------
25 Mar 1995@1611  Original Fill    A DIVISION MAIN OP P   1 of 1
```

After the modified (renewed, reactivated) RX has been dispensed, the message, "Order has changed: Expand to view" will be replaced with the message, "Last Dispensed 01Jun01".

It should be noted that existing CHCS functionality currently displays a message on the POL which indicates an order has been discontinued or placed on hold.

3.4.2.3 **Non-Compliance Bulletin.**

If a patient does not pick up prescription, a Pharmacy user can mark the prescription as non-compliant. The system will send a mail message to the ordering HCP. If multiple RXs for a patient are marked non-compliant at the same time (using the Dispensing option), the ordering HCP will receive one mail message for a group of RXs for a non-compliant patient.

The Pharmacy menu contains an option 'NON' (Enter Noncompliance Data) which would allow RXs to be individually marked as non-compliant. At the time RXs were marked non-compliant, however, there was no corresponding MailMan bulletin. Even though this option existed previously, it is V4.5 that now MailMan bulletin will be sent to the Ordering Provider if 'NON' is used.

SAMPLE SCREEN

```
Patient : JONES,MARK
FMP/SSN : 20/554-27-7242
Pharmacy: A DIVISION MAIN OP PHARMACY
Comment : PATIENT REFUSED DRUGS

Your patient has not picked up the prescription(s) listed below.
For more information, please contact the A DIVISION MAIN OP PHARMACY.

Order #: 950229-00083                    Fill #: 1
RX ASA--PO 325 MG TAB ~T2 QID RF0 #1 DS30 on Mar 1995@1727

Order #: 950229-00079                    Fill #: 2
RX LASIX--PO 40 MG  ~T1 TAB PO Q6H F21 D RF0 #1 DS30 on 25
Mar 1995@1235.

Order #: 950229-00074                    Fill #:1
RX PROPRANOLOL--PO 10MG ~T1 TAB PO BID F5D RF0 #10 DS30
on 25 Mar 1995@0937.
```

It should be noted that the comment entered above is the comment entered by a Pharmacy user when a group of RXs are marked non-compliant using the dispensing option.

It should also be noted that if there non-compliant RXs originate from different Pharmacies, a non-compliance mail message will be sent from each different Pharmacy.

3.4.3 File and Table Changes.

There will be no requirements for file and table changes for the Clinical subsystem.

3.4.4 Implementation Issues.

It needs to be confirmed whether or not the Pharmacy has activated the Display Dispensing option. If so, the Clinical POC should be informed and receive a demo of this feature. The Clinical POC should then inform the Clinical users of this feature.

Another feature which Clinical users should be made aware of is the non-compliance mail message. This bulletin will appear in the the ordering provider's e-mail indicating that the patient

has not picked up prescriptions within the allotted time frame and are now considered to be non-compliant by the Pharmacy.

3.5 LAB DUPLICATE TEST WARNINGS AND PROCESSING PRIORITY CHANGES.

3.5.1 Overview of Change.

This change incorporates a Lab duplicate checking parameter which has been expanded from a 24-hour check to a maximum range of 60 days before and after the date/time the order is scheduled. An improvement in the response time for duplicate checking is also anticipated.

The parameters for lab test processing priorities have been enhanced also. They may be set to determine the highest processing priority allowed for a particular test as well as options for lower processing priorities available in CHCS.

3.5.2 Detail of Change.

3.5.2.1 Duplicate Lab Orders.

Prior to Version 4.5, a lab test such as a UA could be entered into CHCS initially and then entered again after 24 hours had elapsed. The system would allow that second order to be processed without performing a clinical screening for duplicate orders. With Version 4.5, the Laboratory can set the duplicate checking parameters to a wider range of number of days from 1 to 60 (enhancement) rather than just 24 hours. This will allow the Clinical user to not only see what has been ordered, perhaps by another provider, as well as what lab tests have been scheduled for that patient up to 60 days in the future (based on parameters in the Lab system).

Clinical users will experience a difference in duplicate lab check warnings on some lab orders if this parameter is changed by the Lab. The Clinical user should be informed that there may be a greater potential to identify a duplicate test warning during an Order Entry session if this parameter is changed.

The Version 4.5 enhancement will not only warn of a duplicate order, but will also display the date/time the test was collected so the ordering provider can better evaluate whether to proceed with the order or cancel it. Information for a duplicate order will display as follows:

SAMPLE SCREEN

```
                    ***POSSIBLE DUPLICATE ORDERS***

Existing Orders:
     951130-00005 *NOTIFY* HBSAG-WARD/CLINIC COLLECT-BLOOD-MARB/RED
Q4H QD for 5 days   Starting on 30 Nov 1995@1400 Last Collected on
01 Dec 1995@1130

Lab Test Ordered:
     HBSAG for 06 Dec 1995 @1130
Do you wish to continue with this order?NO//
```

3.5.2.2 Lab Processing Priority - Highest.

Currently, each lab test in the Lab Test file contains a field that defines whether or not the test can be done STAT. If the field is set to "NO" or left undefined, the top priority for lab test processing is ASAP.

A new field in Version 4.5, "Highest Priority", now allows the lab to define the highest priority which can be ordered for a particular test. If the field is left undefined in the Lab Test file, then the priorities allowed will be ASAP, PREOP, NOTIFY AND ROUTINE, and ROUTINE.

If the Clinical user chooses a lab processing priority that is not allowed for a specific test, such as the STAT shown in the screen sample, a modified error message will provide the highest lab processing priority for this test, as defined in the Lab Test file.

The following screen sample shows an example of the quick method for Lab Order Entry for a specific test defined with the highest priority "NOTIFY AND ROUTINE." The user enters STAT in this example.

SAMPLE SCREEN

CHOOSE DEFAULTS, or Press Return for Full Screen Entry (required for Anatomic Pathology, Blood Bank, and all Continuous lab tests.)

DATE/TIME OF TEST (NOW, AM, QAM, or Date&Time): T+10
Collection Method: SEND PATIENT TO LAB// SEND PATIENT TO LAB
COLLECTION PRIORITY: ROUTINE// ROUTINE
PROCESSING PRIORITY: ROUTINE// STAT
ORDER COMMENT:

Select LABORATORY TEST: HEPATITIS A VIRUS ANTIBODY

The highest lab processing priority for this test is NOTIFY AND ROUTINE.
LAB PROCESSING PRIORITY: ROUTINE//

NOTE: The LAB PROCESSING PRIORITY field will display again and allow the Clinical user to enter an allowable lab processing priority. If the Clinical user again chooses STAT, rather than the allowable priority, the lab processing priority prompt will display again.

3.5.2.3 Lab Processing Priority - Default.

The following screen sample will show an example of the quick method of Lab Order Entry for a specific test, when the chosen lab processing priority is lower than the defined default priority in the Lab Test file.

SAMPLE SCREEN

HENDERSON, PETER   Age: 42   20/011-12-1234

CHOOSE DEFAULTS (or Press Return for Full Screen Entry)

DATE/TIME OF TEST (NOW, AM, QAM, or Date&Time): T+10 (04 Jun 1995)
Collection Method: SEND PATIENT TO LAB//SEND PATIENT TO LAB
COLLECTION PRIORITY: ROUTINE// ROUTINE
PROCESSING PRIORITY: ROUTINE// NOTIFY AND ROUTINE
ORDER COMMENT:

Select LABORATORY TEST: INDIA INK TEST

The default priority for this test is ASAP.
Do you wish to accept the default priority? Y//

If "NO" is selected, the Lab order will be processed with the lower processing priority selected by the user.

3.5.2.4 __Full Screen Lab Order Entry Method.__

The full screen lab order entry method applies similar logic as
explained previously, for the quick screen method. If the
Clinical user attempts to choose a non-allowable lab processing
priority, such as STAT in this screen sample, the screen will
display help text, and when the user enters (L)ist of Values, the
system will display a picklist of allowable lab processing
priorities for that specific test.

SAMPLE SCREEN

```
HENDERSON,PETER        Age: 42   20/011-12-1234     Laboratory Order  HEPATITIS A
VIRUS ANTIBODY       BLOOD                950324-00002
===================================================================
SCHEDULE TYPE:  NOW
COLLECTION METHOD:  LAB COLLECT
COLLECTION PRIORITY:  ROUTINE
LAB PROCESSING PRIORITY: ROUTINE
ORDER COMMENT:

NOTE:

===================================================================
3        PREOP
6.5      NOTIFY AND ROUTINE
9        ROUTINE

+-Make a Choice = SELECT-----------------------Exit = F10-------

Help = HELP              Screen Exit = F10       File/Exit = DO
```

Once the selection is made, the cursor will return to the LAB
PROCESSING PRIORITY field and display the selection as shown
below:

    i.e., LAB PROCESSING PRIORITY: PREOP

If the Clinical user presses <CR> without making a selection, the
system will place the cursor at the LAB PROCESSING PRIORITY field
and will display the Default, as defined in the Lab Test file.

3.5.3 __File and Table Changes.__

No file and table changes are required for the Clinical
subsystem.

3.5.4 __Implementation Issues.__

Inform Clinical users of any changes to duplicate checking on lab
orders if the Lab parameter is changed.

As part of this Version 4.5 change, the users should also be made
aware that the changes/enhancements will provide Clinical users

with established lab test priorities allowing highest and default priority parameters. A list of allowable priorities per lab test will be tied into the display of error messages when the choices are incorrect.

3.6 ORDER ENTRY LINKED WITH APPOINTMENTS (WAM).

3.6.1 Overview of Change.

The CHCS WAM (Workload Assignment Module) is an enhancement for Version 4.5 which will gather workload reporting data as Clinical users link new orders to scheduled appointments for outpatients. The appointments can also be unlinked.

3.6.2 Detail of Change.

CHCS WAM has been designed to interface with the external systems EAS III and STARS/FL to provide CHCS MEPRS data related to workload. When an ordering HCP or another Clinical user begins the order entry process, the orders entered can be directly linked to a specific appointment indicated by the user. The Clinical users will have the capability to:

- Link orders with an appointment for that day.

- Select out of a picklist of appointments two weeks prior to or two weeks after current day to enter orders.

- Unlink orders for a particular appointment.

- Transfer orders from one appointment to another.

3.6.2.1 Linking Orders with Current Appointment.

When clinical users access order entry, they are prompted for a Requesting Location. Based on the Requesting Location, the system will search for a scheduled appointment for today for the Requesting Location. If there is a scheduled appointment for today at the Requesting Location, this appointment will be provided to the user as a default appointment with which to associate any new orders. The linking is optional.

SAMPLE SCREEN

```
BROWN,ROBERT      Age: 34          20/559-27-7242      OUTPT POL
1 LAB POTASSIUM~SEND PATIENT TO LAB~BLOOD~MARB/RED
     on 06 May 1995 . . . . . . . . . . . . . . . SMITJ 26APR@0937
2 RAD CHEST AP~MAIN RADIOLOGY (A)~AMB on 26
     Apr 1995@0937. . . . . . . . . . . . . . . . SMITJ 26APR@0937
3 CLN APPT FOR: CARDIOLOGY (A) on 09 May
     1995{DIG LEVEL} ~Scheduled for
     9MAY@1600  . . . . . . . . . . . . . . . . . SMITJ 27APR@1432
  -------------------------------------------------------------
*OUTPAT*

ACTION: NEW

Associate outpatient orders with NEW appointment in CARD/ADIV 09 May 1995@1600
YES// NO
```

If the user accepts the default answer of "YES", the system will associate outpatient orders entered during the order entry session to the default appointment.

If the user responds "NO" to the default, the system will display a picklist of appointments. Appointments for two weeks in the past through two weeks in the future will be displayed.

3.6.2.2 Linking Orders within a Picklist of Multiple Appointments.

If there are multiple or no appointments for today, or the Clinical user enters "NO" at previous prompt, the system will display a picklist of all appointments for a four week period. The user may then select the appropriate appointment to link the orders to be entered. Appointments for two weeks in the past through two weeks in the future will be displayed.

Only appointments with a status of pending, kept, walk-in, sick-call, occ-svc and tel-con will be displayed on the picklist of appointments. (It should be noted that Emergency room appointments will be included in the picklist of appointments.)

After the system displays the appointment picklist, the user may select an appointment to associate with outpatient orders. (The screen will display the help text, "Use SELECT key to choose an appointment to link with orders."

SAMPLE SCREEN

```
 Scheduled appointments for BROWN,ROBERT

Use SELECT key to choose an appointment to link with orders.

  Date/Time    Clinic/Div  HCP             Type StatusReason
  --------------------------------------------------------------
+
  01MAY@0930   ORTHO/A     GREENBURG,PERRY NEW  KEPT     CHECKUP
  02MAY@1600   CARD/LGLY   BROWN,WILLIAM   FOL  KEPT     CHECKUP
* 03MAY@1435   CARD/LGLY   BROWN,WILLIAM   FOL  KEPT     LABS
  04MAY@1430   ORTH0/A     GREENBURG,PERRY TCON TEL-CON  CAST
  05MAY@1300   NEUR0/B     WALKER,PAMELA   FOL  KEPT     MIGRAINE
  09MAY@1600   CARD/LGLY   BROWN,WILLIAM   FOL  KEPT     DIG LEVEL
  15MAY@1300   NEUR0/B     WALKER,PAMELA   FOL  PENDING  MIGRAINE
  16MAY@1300   NEUR0/B     WALKER,PAMELA   FOL  PENDING  MIGRAINE
  16MAY@1600   ALLER/A     SMITH,THOMAS    NEW  PENDING  WORKUP
  17MAY@1300   NEUR0/B     WALKER,PAMELA   FOL  PENDING  MIGRAINE
  18MAY@1300   NEUR0/B     WALKER,PAMELA   FOL  PENDING  MIGRAINE
  19MAY@1300   NEUR0/B     WALKER,PAMELA   FOL  PENDING  MIGRAINE
  19MAY@1300   ALLER/A     SMITH,THOMAS    FOL  PENDING  SHOTS
  20MAY@1600   ALLER/A     SMITH,THOMAS    FOL  PENDING  TESTS
+
  --------------------------------------------------------------
Search  pgUp  pgDown   Help   eXit
Enter a new date range to search for more appointments
```

The action bar shown in the Sample Screen above will have the
following actions and on-line help:

```
  Search:
   Enter a new date range to search for more appointments
           The user will be prompted: "Earliest Date:
                                       "Latest Date:
    pgUp:
   Move up one page to view earlier appointments.
  pgDown:
   Move down one page to view later appointments.
    Help:
   Display action-bar help
    eXit:
   Leave picklist without linking orders to an appointment.
```

(The user may use the F9 key to expand an appointment entry and
display the reason for an appointment. After the system displays
a picklist of appointments, the user can select an appointment to
link with orders by placing the cursor next to the desired
appointment and pressing the <Select> key. After selecting an
appointment or exiting from the picklist, the user will continue
with the order entry process.

If the clinical user does not want to link orders with any of the
appointments in the picklist, the e**X**it option in the Action Bar
maybe used, at which time the system will bring the user to the
'Select ORDER TYPE' prompt, to continue with the order entry
session.

It should be noted that orders which are linked to an appointment on the outpatient page will remain linked to that appointment when those orders are modified, renewed, or reactivated in the future.

3.6.2.3 <u>Unlinking Orders from an Appointment.</u>

The system will provide the capability to un-link orders from an appointment and if desired, re-assign these orders to another appointment. The user can un-link orders from an appointment by accessing the outpatient POL and entering "UNLK" at the "ACTION:" prompt of the POL.

SAMPLE SCREEN

```
 BOLLMAN,FRANK            Age:33    20/328-42-0090      OUTPAT POL
 ------------------------------------------------------------------
 1 LAB POTASSIUM~SEND PATIENT TO LAB~BLOOD~MARB/RED
      on 28 Aug 1995  . . . . . . . . . . . . . .  RICHK 28AUG@0941
 ------------------------------------------------------------------
 *OUTPAT*

ACTION: UNLK
```

After the user enters "UNLK" at the "ACTION:" prompt of the POL, the system will display a list of orders which can be unlinked from an appointment. The user can select orders to un-link from an associated appointment.

It should be noted that the system will search for all orders for a patient as well as the appointment statuses, which can be un-linked from an appointment. The initial search range for appointments will be from two weeks in the past to two weeks in the future.

SAMPLE SCREEN

```
BOLLMANN,FRANK      Age:33    20/328-42-0090    OUTPAT UNLINK ORDERS
_____
Use SELECT key to choose an order to UN-LINK from an appointment.

CANCELLED NEW APPT in CARDIOLOGY CARE CLINIC A DIVISION with RICHARDS,KEVIN on
21 Aug 1995@0930
----------------------------------------------------------------
*   1 MED   ASPIRIN-TBCH (BABY ASPIRIN) <ORAL> 81MG AM
            {QD} PRN  for 40 days Starting 17 Aug 1995
            @1121  . . . . . . . . . . . . . .   RICHK   21AUG@1021
*   2 LAB   *NOTIFY* CHEM 7~WARD/CLINIC COLLECT~BLOOD
            ~MARB/RED  1400 PRN  QD for 10 days
             starting 18 Aug 1995@1209 {Compare with
             other panels.}  . . . . . . . . .   RICHK   21AUG@1021
*   3 RAD   ANKLE, RT~MAIN RADIOLOGY (A)~AMB   on
            14 Aug 1995 {XRAY}  . . . . . . . .   RICHK   21AUG@1022
KEPT FOL APPT in CARDIOLOGY CARE CLINIC at A DIVISION on 22 Aug 1995@1230 {Check
DIG level}
 ----------------------------------------------------------------
4 LAB   BUN/CREATININE RATIO~SEND PATIENT TO LAB
        ~BLOOD~MARB/RED   on 22 Aug 1995  . .  RICHK   22AUG@1342
        CANCELLED

OCC-SVC TCON APPT in CARDIOLOGY  CLINIC B DIVISION on 23 Aug 1995@1432
----------------------------------------------------------------
   5 LAB   ~SEND PATIENT TO LAB~BLOOD~MARBLE/RED
           on 28 Aug 1995.
----------------------------------------------------------------
 Search    pgUp    pgDown    Transfer    uNlink    Help    eXit

Un-link order(s) and re-assign them to another appointment.
```

If the Clinical user chooses to unlink orders from an appointment, they can either use arrow keys to highlight the uNlink option and press <Return> or type the bolded, capitalized letter "N" to carry out the action.

The system will display on-line help text for the actions on the action bar:

  Search:
   Enter date range to search for appointments to un-link from
   orders.
    pgUp:
   Move up one page to view earlier appointments.
  pgDown:
   Move down one page to view later appointments .
Transfer:
   Undo link between order(s) and re-assign them to another
   appointment.
  uNLink:
   Undo link between order(s) and an appointment.
    Help:
   Display action-bar help.
    eXit:
   Leave picklist without un-linking orders from an appointment.

3.6.2.4 Reassigning Orders to Another Appointment.

If the user selects the "uNlink" action from the action bar, the
system will undo the link between selected orders and an
appointment.

If the user selects the "Transfer" action from the action bar,
the system will display a picklist of appointments and the user
may select an appointment to link with orders.

SAMPLE SCREEN

```
Scheduled appointments for BOLLMAN,FRANK


Use SELECT key to choose an appointment to link with orders.

Date/Time     Clinic/Div    HCP              Type    Status   Reason
------------------------------------------------------------------ 01MAY@0930
ORTHO/ADIV    WILSON,THOMAS    NEW      KEPT     CHECKUP
*15MAY@1430   NEURO/LGLY    SMITH,JANET       FOL      KEPT     EXAM
21MAY@0800    CARD/BDIV     RICHARDS,KEVIN   FOL      KEPT     DIG
------------------------------------------------------------------
Search    pgUp   pgDown   Help   eXit
```

After selecting an appointment to link with orders, the system
will link (and re-assign) orders to the selected appointment.

3.6.3 File and Table Changes.

There are no file and table changes for Version 4.5.

3.6.4 Implementation Issues.

Inform Clinical users that orders for outpatients will have to be
linked to patients' appointments if the WAM is initialized.

UDKs formatted prior to Version 4.5 will need to be modified to
incorporate the steps for linking orders with appointments.

3.7 RX MIN/MAX DOSAGE CHECKING FOR MG/ML.

3.7.1 Overview of Change.

The system can now perform min/max dosage clinical screenings on
the drug orders with MG or ML measurements. Previous to Version
4.5 dosage checking did not occur if the sig code entries by the
HCPs included measurements of MG or ML. Dosage checks, as
always, will only occur for drugs if the site's Pharmacy enables

this option and sets a minimum and maximum range for a particular
drug.

3.7.2 Detail of Change.

Prior to Version 4.5 dosage checking took place when a user filed
a new prescription if it was enabled by the site's Pharmacy.
This dosage checking was based on the entries for the SIG CODE
and the Min/Max parameters established in the Pharmacy files for
that drug. However, if the sig code included measurement units of
MG or ML, the system was not able to perform screenings against
the min/max dosage parameters. With the install of Version 4.5,
the system will now have the capability to do a clinical
screening on a sig code containing MG or ML (such as "T 1 ML
TID").

The daily dosage prescribed in a drug order is computed and
compared to minimum and maximum daily dosages for that drug set
by the Pharmacy. If the computed daily dosage value falls below
the Pharmacy-defined minimum or exceeds the Pharmacy-defined
maximum for that drug, a drug warning will be generated.

3.7.2.1 Impact on Existing Functionality.

When a SIG contains the medication instruction MG or ML (such as
in "T 5 ML" or "GV 5 ML"), dosage checking will be correctly
calculated. Previously the user received a message stating,
"UNABLE TO PERFORM DOSAGE CHECKING."

3.7.2.2 Sig Code Entry.

For accurate order entry, it is assumed that spaces are used
appropriately as delimiters between all components of the SIG.
For example, a correct SIG would be "T 12.5 MG BID." If a sig
code was entered inappropriately such as "T 12.5 MGBID", the
patient would not be able to understand the prescription
instructions because the system would not be able to translate
without the correct use of spaces as delimiters.

The SIG written for the RX will contain an amount, a unit of
measurement, and a timing. The unit used in the SIG will be
compatible with the content unit of the drug.

3.7.2.3 Sig Code Examples.

-   A SIG such as "T 40 MG QID" will now compute to a daily
    dosage of 160 MG. The same is true of ML. Prior to Version
    4.5, the system did not correctly compute MG and ML sig
    entries for Min/Max dosage checks.

- If a drug is defined with a content unit of MG/ML or MG/nML (where n is a numeric value), ordering in MLs, MGs or TEASPOONFULS will compute the correct daily dosage. If the min/max dosage is defined in MG or ML, the proper unit conversion will take place. For instance, if the SIG is ordered in MLs and the min/max unit is defined in MG, a conversion to MG will take place, if the drug was defined with a content unit of MG/ML. The same will be true if the drug content unit is MG/nML and the SIG is ordered in MGs, with the min/max unit defined in MLs. A conversion will also happen if the min/max unit is defined in MG or ML and the SIG is ordered in TEASPOONFULS. This unit conversion is done so that the SIG computes to a value consistent with the min/max definition.

3.7.2.4 Clinical Screenings.

The system will compare the dosage ordered for a medication against the minimum and maximum daily dosages defined for that drug and patient age in the Pharmacy files. A clinical screening will be created if the dosage is either under the minimum or over the maximum daily dosage defined. Dosage checking cannot be performed unless the Pharmacy has: 1) enabled Min/Max overall clinical screening parameters; and, 2) a Min/Max range is set for the drug being ordered and the age/sex of the patient is within the set parameters. In this case, the system will notify the user by generating one of several messages. The messages are "No dosage range defined," "No dosage range defined for this patient's age," and "Unable to perform dosage checking (SIG)."

PLEASE NOTE: The notification messages to the user entering Med and IV orders will change. Previously the message stated "Cannot check dosage for (n) drug(s)" ("n" stands for an integer). Now the message will read "Unable to perform dosage checking (Amt/Units)".

3.7.3 File and Table Changes.

There will be no requirements for file and changes in the Clinical subsystem.

3.7.4 Implementation Issues.

First, it should be confirmed with the Pharmacy POC that the necessary daily dosage checking parameters have been built into the system files. Second, it should also be verified that the site has enabled the Dosage Drug Check to provide the necessary clinical screenings and drug warnings during RX/MED order entry.

It should be suggested to the Pharmacy POC to inform the ordering HCPs that their sig code entries which include MG and ML quantities can now be correctly screened against the min/max dosage parameters for drugs. Drug warnings will appear if the amounts indicated are above or below the dosage settings.

As in training, it should be emphasized again, the importance of entering sig codes correctly: correct spacing; starting sigs with appropriate verbs such as T for Take, or I for Insert or AP for apply; identifying the quantity and the frequency; indicating refills as necessary (RFn); identifying number of days (Fn) if other than the default of 30 days, etc.

A notification message should be sent to all HCPs who have created order sets which contain prescriptions with pediatric doses so that their order sets which contain sigs for RX and IV orders may be updated with this information.

3.8   **DIETETIC/MED AND DIETETIC/LAB CHANGES.**

3.8.1   **Overview of Change.**

The Medications of Interest Report and Abnormal Clinical Chemistries of Interest Report will provide information for dietary consultations prior to diet orders being entered into CHCS.

3.8.2   **Detail of Change.**

3.8.2.1   **Medications of Interest Report.**

The purpose of the 'Medications of Interest' Report is to provide Clinical Dietetic personnel with the capability to identify, create, update, and track Medications of Interest for dietary consultation. This capability will provide them with the information necessary to 'update patient's diets,' when needed.

The Clinical Dietitians will select, create, and update the medications of interest from the drug file which will be flagged for later reporting purposes.

Items in the drug file previously identified and flagged for tracking purposes will display on the 'Medications of Interest' Report when printed.

Dietetics personnel must first identify those medications which will be utilized for tracking purposes. This list will initially be created by the Clinical Dietitian utilizing the Drug File to establish the list. For tracking purposes, the following ordering types will be used, i.e., IVD (IV drip), IVF (IV fluid),

IVH (IV hyperal), IVP (IV piggyback), and MED (unit dose). The list may be amended as necessary. The identified medications of interest will be flagged in the drug file and when ordered will be available for printing on the 'Medications of Interest' Report. When the patient is dispositioned, or the medication has been discontinued, the patient will be automatically removed from the report.

The purpose of the 'Create' Medications of Interest is to allow Clinical Dietitians to establish, via the Drug File, a list of identified medications for tracking purposes. Dietitians identify the drugs for tracking so that they may, in turn, provide appropriate dietary counseling.

Utilizing the Dietetics menu, i.e., DTS, Data Management (DM), AD Administrative Files Menu, CM, (Create/Update Medications List), the authorized Clinical Dietetics user will create the initial Medications of Interest List. The user may enter a specific drug, if known, or ask for help by entering a "?" with the beginning characters of the drug name or use the "?" and receive an alpha list of all the drugs in the file.

Once these drugs are selected, the list will be available for future use, i.e., to add, update, or delete entries from the list.

All medications identified for tracking will be flagged in the drug file so that when these medications are ordered, patients taking these medications will display on the 'Medications of Interest' Report when run. This option may also be used to add, update, or delete drugs from the list.

After the user creates the list, the user will be asked if they
want to print the list. The default will be NO//. If the user
elects to print the list, then the following ** SAMPLE ** list
will display:

SAMPLE SCREEN

```
1 AIR TRANSPORTABLE HOSPITAL (ACC)        28 Jul 1995@111620 Page 1

                * * * MEDICATIONS TRACKING LIST * * *

-----------------------------------------------------------------
Medications
-----------------------------------------------------------------
AACAROLEBOTH--PO 25MG TAB
ACETAMINOPHEN--PO 325MG TAB
AMPICILLIN--PO 500MG CAP
DACTINOMYCIN--IV 0.5MG/ML SOLR
DEMECLOCYCLINE--PO 150MG TAB
DESIPRAMINE--PO 150MG TAB
DESIPRAMINE--PO 25MG TAB
DIAZEPAM--INJ 5MG/ML SOLN
DIAZEPAM--PO 2MG TAB
DIAZEPAM--PO 5MG TAB
HYDRALAZINE--PO 50MG TAB
PHENOBARBITAL--INJ 12.5MG/SYR SOLN
TYLENOL #3(OR SUBST)--PO ELIX
```

The following is a sample of the modified DTS (Dietetics) menu to
include the new option, Create/Update Medications of Interest
(CM).

Menu Path: DTS>DM>AD>CM

SAMPLE SCREEN

```
        DT    Enter/Edit Diet File
        DP    Dietetics Parameter Maintenance
        CC    Create/Update Clinical Chemistries of Interest
   *    CM    Create/Update Medications of Interest
```

After creation of the list of medications to track, the Clinical
Dietitian may print, on an as needed basis, the 'Medications of
Interest Report.' The report will be sorted by ward, and within
ward by patient name. Displayed on the report will be the ward,
patient name, room/bed, diet (abbreviation), med date (which is
the date the medication was first started), and the medication.
The user will have the capability of printing one ward, or all
wards.

If the user elects to print all wards, the system will prompt the
user to enter <Yes> to print each ward on separate pages. When
<YES> is selected, there will be a page break between wards and
the ward abbreviation will display in the header. The user will
note when selection is made that if there is no data available

for a particular ward it will not print on the report. If the
user selects <No> to print all wards, than the report will
display all wards consecutively. This functionality may be used
for those Medical Treatment Facilities (MTFs) which have limited
Clinical Dietetic staff and may want to see all wards on one or
more pages. The larger MTFs with more staff may want to utilize
the functionality to page break after each ward so that the
dietitian working on that particular ward may receive only their
individual ward printouts.

The menu path for report selection is as follows:

    Menu Path: DTS>OF>PM

SAMPLE SCREEN

```
            DO    Enter/Maintain Diet Orders
            DR    Diet Roster
            FR    Future Diet Roster
            PR    Patient Room & Bed
            PC    Print Clinical Chemistries of Interest
      *     PM    Print Medications of Interest
```

When the authorized user selects <PM>, the following displays:

```
    Select Ward(s) for printing
------------------------------------------------------------------
    2A
    2B
    2SIP
    4B
    .
    .
------------------------------------------------------------------
```
Please select ward(s) for printing on the Medications of Interest
Report. If no data, ward will not print Select all = F17

DEVICE:

The following is a sample report display when the MTF chooses to print (A)ll wards on one or more pages:

SAMPLE SCREEN

```
1 AIR TRANSPORTABLE HOSPITAL (ACC)        28 Jul1995@111538 Page
              Personal Data - Privacy Act of 1974 (PL 93-579)

                  * * * MEDICATIONS OF INTEREST * * *
                            All Wards

--------------------------------------------------------------------
Patient Name               Room-Bed       Diet     Med       Medications
                                                   Date*
--------------------------------------------------------------------

Ward: 4B

DUVALL,RICK    103-B       ADA                     29Jun95   AMPICILLIN--PO
                                                   29Jun95   DIAZEPAM--PO
HAPTONSTAHL,HEIDI                          CL      29Jun95   AMPICILLIN--PO
                                                   29Jun95   DIAZEPAM--PO
HAPTONSTAHL,HELEN          104-C                   24Jul95   AMPICILLIN--PO
                                                   24Jul95   DIAZEPAM--PO
HAPTONSTAHL,WARD                                   09Jun95   LITHIUM--PO

Ward: BM

COLLINS,CLYDE                              LOWFAT  09Jun95   DIAZEPAM--PO
COLLINS,MEGAN             102-C            RENAL   20Jun95   POTASSIUM
CHLORIDE--INJ
HAP,JOJO       101-B                               24Jul95   AMPICILLIN--PO
                                                   24Jul95   DIAZEPAM--PO
NGUYEN,TAY THI                             ADA     09Jun95   AMPICILLIN--PO
                                                   09Jun95   DIAZEPAM--PO
REYNOLDS,PETER           100-B                     09Jun95   DIAZEPAM--PO

Ward: PEDS

POOL,MARY                                          21Jun95   ACETAMINOPHEN--PO


* Med date - is the start date of the medication

                      *** End of Report ***
```

If the user chooses to print (A)ll wards with a page break, the
report will display as follows:

SAMPLE SCREEN

```
Tripler AMC, HI                         10 Jun 1995 1200 Page 1
                Personal Data - Privacy Act of 1974 (PL 93-579)

                        * * * MEDICATIONS OF INTEREST * * *
                                All Wards

Patient Name              Room-Bed    Diet  Med   Medications
                                            Date*
-----------------------------------------------------------------------
Ward: 5B

JONES,ELAINE              5B-1  CL    09Jun95      DEXAMETHASONE NA
SMITH,JOHN          5B-2              09Jun95      FUROSEMIDE        (LASIX)

***PAGE BREAK***

-----------------------------------------------------------------------
Patient Name              Room-Bed    Diet  Med   Medications
                                            Date
-----------------------------------------------------------------------
Ward: 6C

BAKER,BOB          6C-1  RENAL 09Jun95        WARFARIN SODIUM
                                                    (COUMADIN)

* Med date - is the start date of the medication.

                        *** End of Report ***
```

If the user chooses to print One ward, the report displays as
follows:

SAMPLE SCREEN

```
Tripler AMC, HI                        10 Jun 1195 1200  Page 1
                Personal Data - Privacy Act of 1974 (PL 93-579)

                        * * * MEDICATIONS OF INTEREST * * *
                                Ward:  2A

-----------------------------------------------------------------------
Patient Name              Room-Bed    Diet  Med   Medications
                                            Date*
-----------------------------------------------------------------------
SMITH,JOHN          2A-1  CL    09Jun95       FUROSEMIDE(LASIX

* Med date - is the start date of the medication.

                        *** End of Report ***
```

3.8.2.2 <u>**Abnormal Clinical Chemistries of Interest Report.**</u>

The purpose of the 'Abnormal Clinical Chemistries of Interest' Report is to provide Clinical Dietetic personnel with the capability to identify, create, and track lab tests with resulting abnormal values of interest for dietary consultation. This capability will provide them with the information necessary to assess or reassess the patient's diet, and make changes as indicated.

Dietetics personnel must first identify the lab tests which will be utilized for tracking purposes. This list will initially be created by the Clinical Dietitian utilizing the Lab File to establish the list. The list may be amended as necessary. All current inpatients who have been identified with abnormal lab results will display on the 'Abnormal Clinical Chemistries of Interest' List.

Patients will be removed from the list when dispositioned from the MTF or when the report is printed, and there are no abnormal lab results for the lab tests indicated.

The Clinical Dietitian will initially build the 'Abnormal Clinical Chemistries of Interest' list utilizing the Lab File (file #60) to create the list. After the list is built, the user may amend the list as needed.

The "Abnormal Clinical Chemistries of Interest' Report is available on an 'as needed' basis from the Clinical Dietetics Menu. Patients will be removed from the list when dispositioned from the MTF or when the report is printed, and there are no abnormal lab results for the lab tests indicated.

The Clinical Dietitians will select, create, and update the Abnormal Clinical Chemistries of Interest from the lab file.

Lab tests previously identified by the Clinical Dietitian for tracking will display on the 'Abnormal Clinical Chemistries of Interest' when the lab test identified for all current inpatients have abnormal values.

Once these tests are selected, the list will be available for future use, i.e., to add, update, or delete items of interest from the list.

After the user has created the list, they will be prompted to
print the list. The default is <NO>. If the user opts to print
the list the following ** SAMPLE ** list will display.

SAMPLE SCREEN

```
1 AIR TRANSPORTABLE HOSPITAL (ACC)       28 Jul 1995@111541 Page 1


                   * * * CLINICAL CHEMISTRIES TRACKING LIST * * *

-----------------------------------------------------------------
Clinical Chemistry                        Print Name
-----------------------------------------------------------------
1HR.GTT(URINE)                            1HR.GTT
2HR.GTT(URINE)                            2HR.GTT
ACETAMINOPHEN                             ACETAMN
ALUMINUM                                  AL
ANTINUCLEAR ANTIBODY                      ANA
BASOPHILS-ABS                            BASO #
CA++ OXALATE CRYSTALS                     CA++ OX
CREATININE,URINE                          UR CREAT
POTASSIUM                                 k

                        *** End of Report ***
```

The following is a sample of the modified DTS (Dietetics) menu to
include the new option, Create/Update Abnormal Clinical
Chemistries of Interest (CC).

Menu Path: DTS>DM>AD>CC

SAMPLE SCREEN

```
    DT    Enter/Edit Diet File
    DP    Dietetics Parameter Maintenance
 *  CC    Create/Update Abnormal Clinical Chemistries of Interest
    CM    Create/Update Medications of Interest
```

After creation of the list of lab tests to track, the Clinical
Dietitian may print, on an as needed basis, the 'Abnormal
Clinical Chemistries of Interest list.' The list will be sorted
by ward, and within ward by patient. Displayed on the report will
be the ward, patient name, room/bed, lab test, results date,
notation of low, critical low, high, critical high, amended, and
test results. The user will receive a display of all wards from
which to choose for printing. If the user elects to print all
wards, help text will display asking the user to choose <Yes> to
print each one of the wards on separate pages, or <No> to print
more than one ward on a page. This prompt may be utilized for
small sites that may have limited Clinical Dietetic staff to
print all wards on one page for efficiency purposes. The Larger
MTFs with more staff may want to have page breaks after each ward

so that the Clinical Dietitian working on that particular ward
may receive their individual ward printouts.

The menu path for report selection is as follows:

        Menu Path: DTS>OF>PC

When the authorized user selects <PC>, the following displays:

Select Ward(s) for printing

      2A
      2B
      2SIP
      4B
      .
      .

Please select ward(s) for printing on the Abnormal Clinical
Chemistries Report. If no data, ward will not print.
Select all = F17

Device:

The following is a sample report display when the MTF chooses to print all wards on one page:

SAMPLE SCREEN

```
1 AIR TRANSPORTABLE HOSPITAL (ACC)       28 Jul 1995@111432 Page 1
                Personal Data - Privacy Act of 1974 (PL 93-579)

            * * * ABNORMAL CLINICAL CHEMISTRIES OF INTEREST * * *
                              All Wards

---------------------------------------------------------------------
Patient Name        Room-bed    Date of      Test           Clinical
                                Results      Results        Chemistries
---------------------------------------------------------------------
Ward: 4B

HAPTONSTAHL,HEIDI               22Jun95      H  5.00 mEq/L   K
TRAN,ANH            A-4         15May95      L  3.00 UG/ML   ACETAMN
                                14Jun95      H* 6.70 mEq/L   K
TRAN,BI                         11May95      H  6.00 mEq/L   K
TRAN,TAM                        10May95      H*12.00 mEq/L   K

Ward: BM

HAPTONSTAHL,AMY     107-A       21Jun95         5.00 mEq/L   K
HAPTONSTAHL,JOHN    104-A       12May95      H*12.00 mEq/L   K

Ward: JM

CLOONEY,GEORGE      0020-2C     13Jul95      H*300.00 UG/ML  ACETAMN

---------------------------------------------------------------------
H* - Critical High   H - High   L - Low   L* - Critical Low   /A-Amendment

                        *** End of Report ***
```

If the user chooses to print all wards with a page break, the report will display as follows:

SAMPLE SCREEN

```
Tripler AMC, HI                              10 Jun 1995 1200 Page 1
                 Personal Data - Privacy Act of 1974 (PL 93-579)

                * * * ABNORMAL CLINICAL CHEMISTRIES OF INTEREST * * *
                                  All Wards

--------------------------------------------------------------------------------
Patient Name          Room-bed      Date of       Test            Clinical
                                    Results       Results         Chemistries
--------------------------------------------------------------------------------
Ward: 2A

SMITH,JOHN            2A-1          09Jun95       H* 350.00 MG    SERUM CHOLES

***PAGE BREAK***

--------------------------------------------------------------------------------
Patient Name          Room-bed      Date of       Test            Clinical
                                    Results       Results         Chemistries
--------------------------------------------------------------------------------
Ward: 3B

BAKER,BOB 3B-2        09Jun95       H* 40.00 mg/dl                SERUM UREA
                                                                  NITROGEN
----------------------------------------------------------------------
H* - Critical High  H - High  L - Low   L* - Critical Low /A-Amendment

                         *** End of Report ***
```

If the user chooses to print one ward the report displays as follows:

SAMPLE SCREEN

```
Tripler AMC, HI                              10 Jun 1995 1200
                 Personal Data - Privacy Act of 1974 (PL 93-579)

                * * * ABNORMAL CLINICAL CHEMISTRIES OF INTEREST  * * *
                                  Ward:  2A

--------------------------------------------------------------------------------
Patient Name          Room-bed      Date of       Test            Clinical
                                    Results       Results         Chemistries
--------------------------------------------------------------------------------
Ward: 2A

SMITH,JOHN            2A-4          09Jun95       H* 350.00 MG    SERUM CHOLES

--------------------------------------------------------------------------------
H* - Critical High  H - High   L - Low  L* - Critical Low  /A-Amendment

                         *** End of Report ***
--------------------------------------------------------------------------------
```

3.8.3 File and Table Changes.

There will be no file and table changes needed for Version 4.5.

3.8.4 Implementation Issues.

Inform the site's Clinical Dietetician(s) that there is a mechanism for providing dietary consultations via the 'Medications of Interest Report' and the 'Abnormal Clinical Chemistries of Interest Report' which will allow them to pull reports of patient names who are admitted to wards.

3.9 PWS, CIW, AND NMIS INTERFACES.

3.9.1 Overview of Change.

PWS is a hospital information system developed by WANG and SAIC. As a continued effort in Version 4.5, further work has been done to facilitate the communication link between CHCS and PWS.

CIW is another hospital information system project which requires a communication link with CHCS. In Version 4.5, an Application Programmer Interface (API) was developed for CIW to support interfacing of external Order Entry or Results Retrieval systems with CHCS.

The NMIS is interfaced with CHCS via HL7 messages from the host system. In Version 4.5, CHCS provides patient demographic and diet data to NMIS.

3.9.2 Detail of Change.

3.9.2.1 PWS Changes.

At the time of this writing (March of 1996), PWS is being prototyped at Scott Air Force Base only. PWS will enable DoD physicians to enter Outpatient Medications (RX), Laboratory (LAB), and Radiology (RAD) orders via CHCS. HL7 (Health Level 7 Standard, Version 2.2) request messages relative to the Order Entry functionality will initiate from PWS and be transmitted to CHCS. CHCS will, likewise, send response HL7 messages to PWS to facilitate the communication link necessary for the order processing.

3.9.2.2 CIW Changes.

In Version 4.5, the entry and activation of Admission, Disposition and Transfer (ADT) orders, registration, IVF, IVH and

IVD order types will not be performed on CHCS. HL7 messages have been created for the following order types in Version 4.5: Lab, Rad, Med, IVD, RX, CLN, CON, ANC, DTS, NRS and NIO.

The Version 4.5 API provides access to the data and processes needed to support the interfacing of external Order Entry or Results Retrieval systems with CHCS. As in PWS, data elements are formatted into HL7 message segments to exchange data between CHCS and CIW.

3.9.2.3 **NMIS Changes.**

In Version 4.5, each time a dietetics order is created and activated on CHCS, an HL7 message will be triggered to NMIS.

This uni-directional interface will avoid manual re-entry into NMIS data which is already available in CHCS. The interface will provide ready access to patient medical information and enable the:

    o   Diet technician(s) to process patient menus, calculate
         diets based on the most recent physicians' diet order.

    o   Diet technician(s) to conduct nutritional screening of
         all new admissions and prioritize care by the
         dietitian(s).

    o   Dietitian(s) to provide timely nutrition intervention
         to patients.

3.9.3 **File and Table Change.**

No file and table changes are necessary for sites since they are not utilizing these newly developed systems.

3.9.4 **Implementation Issues.**

There are no implementation issues for the Clinical subsystem with these enhancements.

****

APPENDIX A:

GENERIC CHANGES

****

This page
has been left blank
intentionally.

OVERVIEW OF GENERIC CHANGES

The following is a review of Version 4.51 changes which will affect the majority of CHCS users.

Unit/Ship ID Look Up

A Primary Unit Ship ID list can now be created, making it easy for users to pick those commonly used at their site. Users will be able to access this list by typing "??" at the Station/Unit field in Mini-Registration.

Previous to this version, if "??" was entered in the Station/Unit field of Mini-Registration, the entire picklist of Station/Units was displayed. This list of over 80,000 entries was impractical to select from. To get a picklist of reasonable length, users could type in the zip codes where the local station/units were found. However, many sites contain Station/Units from several different zip codes.

In Version 4.51, sites will have the option to create a Primary Unit Ship ID list. This list will contain a subset of Station/Units relevant to the site. Users will be able to access this list by typing "??" at the Station Unit field. The user scrolls through the site-specified Primary Unit Ship ID list first. The entire DOD file (over 80,000 entries) will follow so it is still possible to pick from the entire list if necessary. Users will still be able to access Station/Units by entering the appropriate zip code as well.

New Registration Screens

Users will see two new screens in Version 4.51 when working with registration options. The first appears after a DEERS check has occurred. An action bar is displayed for selection of the new options. The second screen is displayed if the patient registered is enrolled in the Managed Care Program (MCP). This screen will display the patient's MCP information.

New DEERS Options

When performing DEERS checks, two new action bars containing a total of three new options will appear whenever patient eligibility data is displayed. If a patient has current DEERS data in CHCS (i.e., they have had a DEERS check within the past 120 hours), then the two new options are (**V**)iew more DEERS data and (**R**)epeat DEERS check. If the patient does not have current DEERS data in CHCS, then the new options displayed are (**V**)iew more DEERS data and (**H**)istorical DEERS (refer to next screen).

```
                      DEERS ELIGIBILITY DATA
            Name: WORKS,PAT                FMP/SSN: 20/225-13-7977
Patient Category: USA ACTIVE DUTY OFFICER      DDS:
         DOB/Age: 01 Feb 1971/25Y              Sex:
-----------------------------------------------------------------------
                     NAME:
                      SEX:                         DOB: 01 Feb 1971
                      DDS:                 Sponsor SSN: 225-13-7977
                      ACV:
           ACV Start Date:                 Region Code:
                  DMIS ID:
   Care Authorization PH#:                 PCM Location:
             Sponsor Rank:
              Sponsor UIC:
              Direct Care: NOT ELIGIBLE       Medicare:
  Dir Care Elig Start Date:                    CHAMPUS:
    Civ Care Elig End Date:
    Eligibility End Reason:


                      BRAC Pharmacy Eligibility
--------- Patient Ineligible. Enter Override to continue ----------
Select to (V)iew more DEERS data, (H)istorical DEERS, (O)verride Ineligibility,
(P)rint, or (Q)uit: O//
```

   * Bold Text denotes new user options.

   If the (V)iew more DEERS data option is selected, the
   following screen appears.

```
                      DEERS ELIGIBILITY DATA
             Name: WORKS,PAT                FMP/SSN: 20/225-13-7997
   Patient Category: USA ACTIVE DUTY OFFICER   DDS:
           DOB/Age: 01 Feb 1971/25Y            Sex:
-----------------------------------------------------------------------
 CHAMPUS Dental Flag:
   Dental Start Date:              Dental End Date:
   Date Last Updated:              Panograph Date:
            NAS Flag:                 Organ Donor:
Reportable Disease                            DNA:
Database (RDDB) Date:
     Date of Request: 21 Jun 2001@095501
--------- Patient Ineligible. Enter Override to continue ----------
Press <RETURN> to continue
```

   If the (H)istorical DEERS option is selected, the following
   screen appears: (refer to Deers Eligibility Data screen)

SAIC/CHCS Doc. TC-4.5-0711
29 Jul 1996

```
                        DEERS ELIGIBILITY DATA
                Personal Data - Privacy Act of 1974 (PL 93-579)

                    Name: CLAY,CAROL          FMP/SSN: 20/199-41-1435
      Patient Category: USA ACTIVE DUTY OFFICER  DDS: 20
                DOB/Age: 05 Jul 1960/36Y          Sex: FEMALE
=====================================================================
           NAME: CLAY,CAROL
                        SEX: FEMALE                DOB: 05 Jul 1960
                        DDS: 20          Sponsor SSN: 199-41-1435
           ACV: A-ACTIVE DUTY/MCP ENROLLED
             ACV Start Date: 18 Sep 1995    Region Code: 02
                    DMIS ID: 6501-TRICARE SERVICE AREA (PORTSMOUTH)
   Care Authorization PH#: 8045357270    PCM Location:
              Sponsor Rank: COLONEL
               Sponsor UIC:
               Direct Care: ELIGIBLE        Medicare: NOT ELIGIBLE
Dir Care Elig Start Date: 01 Jun 1990        CHAMPUS: NOT ELIGIBLE
  Dir Care Elig End Date: 01 Jun 1998
  Eligibility End Reason: R-Estimated Termination of Service

                                 BRAC Pharmacy Eligibility:
    CHAMPUS Dental Flag: 0-NO COVERAGE
       Dental Start Date:                 Dental End Date:
       Date Last Updated:                 Panograph Date:
                 NAS Flag: 24 Feb 1996       Organ Donor: YES
     Reportable Disease                              DNA: NO
     Database (RDDB) Date:
         Date of Request: 14 Jul 1996@134652

HISTORICAL DEERS ELIGIBILITY

 Period          Direct Care    CHAMPUS        Medcare         ACV
 01 Jan 94       ELIGIBLE       NOT ELIGIBLE   NOT ELIGIBLE    N
 30 Sep 94

 01 Oct 94       ELIGIBLE       NOT ELIGIBLE   NOT ELIGIBLE    A
 21 Nov 94

 22 Nov 94       ELIGIBLE       NOT ELIGIBLE   NOT ELIGIBLE    A
 23 Mar 95

 24 Mar 95       ELIGIBLE       NOT ELIGIBLE   NOT ELIGIBLE    N
+29 May 95

Use the PrevScreen and NextScreen to view more data or
Press <RETURN> to continue
```

MCP Enrollment Information Screen

This screen will be displayed to users after they have filed the mini-registration of a patient who is enrolled in the MCP module of CHCS*. It will contain the primary MCP data for the patient, such as their current MCP status, the name of the PCM (Primary Care Manager) to which they are assigned, the PCM location and phone number, and whether or not they are eligible for Medicare. This screen is Information Only, and may not be edited by the user (see sample below).

A-3

> *** NOTE:** This screen will only be displayed if the user
> files the mini-registration by hitting the return key to
> exit the mini-registration screen. Hitting the F10 key and
> then choosing the FILE option, or hitting the DO key to file
> and exit, will not result in this screen being displayed.

```
Patient: CONATSER,MELANIE       Enrollment/Empanellment Information  FMP/SSN:
20/379-43-6100     DOB: 31May66    PATCAT: A11     Sex: M
-----------------------------------------------------------------
          ACV: A-ACTIVE DUTY/MCP ENROLLED
      DMIS ID: 0037-WALTER REED AMC
     PCM NAME: FALZONE,TOM                 PCM Phone: 202 271-5851
 PCM Location:
     Medicare: NOT ELIGIBLE




  Press <Return>:


Help = HELP      Exit = F10     File/Exit = DO         INSERT OFF
```

> ***NOTE:** All Phone Numbers in Patient Registration **MUST** be in
> one of these three (3) formats:
>
>   xxxxxxxxxx
>   xxx-xxx-xxxx
>   (xxx)xxx-xxxx
>
> CHCS patient registration is now transmitted to other
> systems, (i.e., Defense Blood Standard System (DBSS). These
> system will only accept the phone number in those three (3)
> formats.

Workload Assignment Module (WAM)

Sites shall now have an Electronic Transfer Utility (ETU) that
supports the electronic transmission of the Standard Inpatient
Data Records (SIDR), Biostatistics Activities (PASBA), Accounts
Subsystem Definition (ASD) Worldwide Workload and Outpatient
Workload files to the Naval Medical Information Management Center
(NMIMC), Standard Accounting and Reporting System/Fields Level
(STARS) Central Repository, and Expense Assignment System III
(EAS III). Error messages will be generated for errors in
Inpatient Bed Days and delinquent PAS End of Day Processing.

NUERNBERG REFORGER MASCAL FUNCTIONALITY

CHCS Version 4.51 has incorporated the Government designed
software known as the Nuernberg REFORGER MASCAL functionality.
This software, originally developed in Germany for field
exercises, combines many of the most important menu options
within the various functionalities of CHCS with MASCAL Admissions
Capabilities. By placing all these functions into one core
menu, the need for users to navigate throughout the system during
an emergency situation is eliminated. Access to the Mass
Casualty Menu (MCM), located in the Core Application Drivers
Menu, is controlled by the security key **DG MASCAL USER.**

This page
has been left blank
intentionally.

****

APPENDIX B:

MASTER CHECKLIST

****

This page
has been left blank
intentionally.

TABLE OF CONTENTS

GENERIC CHECKLIST ITEMS FOR ALL USERS

B.1 **USER TRAINING.**

B.1.1 **CLN.**

Enhancements should be deemed to Clinical POCs. No hands-on training is essential for CLN users. POCs for the Lab, Radiology and Pharmacy Departments, and any designated Super Users for the clinics/wards would also benefit from attending applicable portions of the demo.

Estimated Time for Demo: 1 - 1.5 hrs.

A demo is also recommended for Clinical users who input LAB/RAD/RX orders. The demo would vary, depending on which options are used at the site. For example: if DBSS is interfaced, the demo would include order entry of blood lab tests; if the PHR Dispensing Option is not activated, this would not be in the demo. Linking orders with appointments is applicable to all order entry users, but could be covered with a handout if this is the only change applicable.

Estimated Time for Demo: 1 - 1.5 hrs.

Dietetics POCs could also receive a brief demo on the DTS changes. A self-guided review using the IUG as a reference could suffice if necessary. This, of course, is only applicable to sites using inpatient functions and the CHCS DTS module.

Estimated Time for Demo: 1 Hr.

B.1.2 **COMMON FILES.**

No demos or user training is required for this module.

B.1.3 **LAB.**

Demos of changes are recommended for Laboratory supervisors, Blood Bank/Donor managers, and personnel involved in File/Table maintenance.

Estimated Time for Demo: 2-3 Hrs.

B.1.4 <u>MCP.</u>

MCP HCF/PAS CLERKS UTILIZING MCP BOOKING

HCF/MCP and PAS clerks should receive the same HANDS-ON training regarding several new sections. Both will utilize similar procedures and see the same screens. These sections are:

       PAS ENROLLEE LOCKOUT   USTF ENROLLEE LOCKOUT
       MCP REGISTRATION DISPLAY   Add Entry of CPT Codes
       Appt Cancellation   Appt Refusal
       Provider Lists

Users who should attend: All Booking clerks (PAS/HCF/MCP)

Estimated Training Time: 4 Hrs

MCP/HCF, PAS SUPERVISORS & DEPT HEADS

Supervisors, MCP & PAS Dept Heads, should at least see a DEMO of the options explained above for HCF/PAS Clerks utilizing MCP booking as well as all MCP enhancements to make informed policy decisions regarding managed care.

These selected individuals should also attend the areas discussed in section A/B above. Additional areas they should receive training in, or a demo at the very least are:

Modify Enrollment Roster   Changes in Eligibility Warning(H)
AD Enrollment END DATES UPDATES
Conversion of Enrollment Data   Appt Cancellation(re files)
Modify CARE AUTH Form   Provider List (Watch Codes)
Batch Enroll/Disenroll   Network Provider Enhancements
MCP Archive

Users: Policymakers, supervisors, PAS & MCP Dept heads, F&TB POCs

Estimated Training Time: 6 hrs

FQA

FQA POCs should see a demo at least of MCP Watch Code Enter/edit option.

NOTE: The Watch Code option is not yet available in Version 4.51, but training is mentioned for future use. Training is not necessary until it is activated.

Estimated Demo Time: 30 minutes or handout of the screens

SYSTEM SPECIALIST/MID/MIS PERSONNEL

These personnel should at least receive a handout or a 30 minute demo on the Archiving procedure.

B.1.5 **PAD.**

It is recommended that PAD supervisors attend a 2-hour "Supervisory Demonstration" to view the software changes and discuss what options will be fully implemented at their site. Based upon the decisions made at this demo, the PAD clerk/general user portion can range from a 1-hour demonstration, to a full 4-hour class designed to train users how to properly utilize both the Casualty SIDR Menu and the MASCAL menu option.

MSA changes require at least a 1-hour demonstration to showcase the software changes with extra time allotted if the site decides that student training/practice is necessary.

	Supervisors	Clerks
Estimated Demo Time (PAD Supervisors):	3 Hrs.	1 Hr.
Estimated Training Time (PAD):	SITE SPECIFIC	
Estimated Demo Time (MSA):	1 Hr.	1 Hr.
Estimated Training Time (MSA):	SITE SPECIFIC	

B.1.6 **PAS.**

a.   Enrollee Lockout

If Enrollee Lockout is activated, <u>minimum</u> training recommended for all PAS Users should include: 1) the use of override codes, and 2) instruction in the site's policies/guidelines regarding override codes.

Users should be trained about MCP Referral Booking and PCM Booking processes so that they will understand why a patient is locked out or which referral (and specialty) to choose in the event that multiple referrals display. Users should be told where to refer a patient in the case of questions regarding access to care.

Estimated Training Time: 2 hours
                         +30 Min to 1 Hr. (optional)*

*Option: Block USTF Enrollee, Appointment Cancellation, Unit Ship ID Look up and new Registration Screens may be taught with Enrollee Lockout.

b.   MCP

It is recommended that PAS Users receive training in several MCP Health Care Finder menu options, and that

these options should be added to the PAS Clerk
Scheduling Menu. These options would include:

PHCF PCM Booking [CP PCM BOOKING]
AHCF Appointment Referral Booking [CP APPT REFERRAL
PROCESSING]
EHCF Enter Appointment Refusals [CP ENTER NETWORK APPT
REFUSALS]
OHCF Output Products [CP PRODUCTS]

Sites may wish to add one additional MCP menu option to
the PAS Scheduling Supervisor Menu, under the
Management Reports Menu:

RHCF => 6 Refused Appointments Report [CP REFUSED
APPOINTMENTS RPT]

Estimated Training Time: 2 hours

NOTE: All training for Version 4.51 could be conducted
in one 4-hour (approx) block. This would include
Enrollee Lockout, MCP Health Care Finder, and other
options (Block USTF Enrollee, etc.).

c.   Block USTF Enrollee

Users should be instructed in site policies regarding
whether or not USTF Enrollees may be booked, entered
through USV, or checked in. Users should be told where
to refer a patient in the case of questions regarding
access to care. If not taught with the Enrollee
Lockout training, a handout should be provided to PAS
users.

Additional training to supervisors/superusers is
recommended to ensure that information is properly
disseminated and policies enforced.

Estimated Training Time: 30 minutes

d.   Appointment Cancellations, Unit/Ship ID Lookup, and New
Registration Screens

If the site will not be activating Enrollee Lockout,
then handouts should be provided to users to explain
these changes.

NOTE: Users will only need to receive a
handout/training in the change to Unit/Ship ID Look Up
IF the site chooses to create a Primary Unit/Ship ID
list. If the site does not choose to create a Primary
Unit/Ship ID list, then there will be no change for PAS
Users.

B.1.7 <u>PHR.</u>

User training for Version 4.51 is going to differ with each site
depending on the enhancements activated. For example, at the
time of this writing, only one site currently needs the Multiple
ATC enhancement. For other sites, if they were using everything
except the Dispensing Option, for example,the familiarization
training could be done with a 1/2 hour demo. An additional 1/2
hour is estimated for the Dispensing Option. Demo instructions
are shown in Appendix F. A demo could be conducted by a Facility
Training Coordinator or pharmacy POC. Except for the Dispensing
Option functionality, most of the enhancements are for Pharmacy
supervisors.

Estimated Demo Time: .5 - 1 Hr.

B.1.8 <u>RAD.</u>

The Radiology changes with Version 4.51 will require a 2-hour
demo. It is recommended that all users receive demo with a
maximum of ten (10) users per demonstration.

Estimated Demo Time: 2 Hrs.

B.1.9 <u>WAM.</u>

WAM users will require training of 5 hours for Clerks and an
additional 3 hours for Supervisors. Users should have general
knowledge of the CHCS with a minimum of MailMan.

Module 1 "Wam User Access" will be the WAM Clerk class consisting
of those users from the Pharmacy, Laboratory, Radiology PAD and
PAS that currently enter workload statistics into EAS and
STARS/FL for their respective functionality. In this module, the
users are given an interview of the WAM option. It will address
WAM functionalities, the WAM process, how to edit workload data,
and how to print reports.

Module 2 "WAM Supervisory Access" will be the WAM Supervisor
class consisting of those users such as Workload Coordinators,
System Managers, Resource Management Personnel, including MEPRS
Coordinators, Budget Assistants and Coordinators. In this module
users are shown how to generate workload reports, manage workload
templates, create the monthly workload templates, create the
monthly workload ASCII file for transmission, and provide a
centralized menu of all MEPRS-related reports.

B.2   IMPLEMENTATION ISSUES.

B.2.1   CLN.

____   **Inpatient Function Only:** Notify the Nurse POC that manual entries for the Lab/Rad due lists will no longer be needed.

____   **Inpatient Function Only:** Notify Clinical users who enter inpatient meds of any changes to their formulary list.

____   **Inpatient Function Only:** Notify Clinical users that their previous order sets may need to be corrected in accordance with the inpatient formulary drug list.

____   Inform the Clinical users how to enter blood orders and autologous donations into the system. Revise order sets post-load that contain any blood orders and replace with new DBSS blood lab orders.

____   Inform users that RX dispensing information is available if Pharmacy utilizes this option at the site.

____   Inform users that e-mail bulletins will be initiated by Pharmacy and sent to ordering provider when patients are non-compliant.

____   Inform Clinical users of any changes to duplicate checking on lab orders if the Lab parameter is changed.

____   Inform Clinical users that orders will have to be linked to patients' appointments if the Workload Assignment Module (WAM) is initialized. UDKs may need revision since order entry pathway is revised.

____   **Inpatient Function Only:** Inform the Dietetics POC of new reports available through CHCS which provide medication and lab test information. The DTS POC will have to decide on meds and lab tests to incorporate in the lists.

B.2.2 COMMON FILES.

____   If interfaces between CHCS and external systems (DBSS, etc.) are utilized, coordinate effort between the site and external system POCs.

____   POST LOAD POST USER: Three (3) options must be scheduled for the WAM Subsystem:

    1.   DOD ASO Update (must be scheduled first)
    2.   DOD SAS Detail Update
    3.   DOD CAC-JON Update

B.2.3 **LAB.**

___ **General** - as with all version upgrades, ensure there are no are <u>no outstanding</u> Collection Lists, Transmittal Lists or Work Documents.

___ **DWC & CPT** - Version 4.51 brings about structural changes in the LAB TEST file, the LAB METHOD file, the CPT/HCPCS file, and the LAB DIVISION file. Ad Hoc sort/print templates in use may need to be redone.

In addition, there are new fields which can be defined through Lab F/T activity to customize duplicate order checking, lab test processing priorities, lab print names, lab print orders, and CPT Codes. This will require familiarity with Lab File/ Table maintenance to complete in a timely manner.

___ **DBSS** - Version 4.51 introduces new tests into the LAB TEST file that will require Lab F/T activity and familiarity with Lab F/T maintenance to complete in a timely manner.

Appendix H in the back of this IUG provides steps for running Ad Hoc reports that are needed and user familiarity with FileMan will enable these reports to be entered and run in a timely manner.

B.2.4 **MCP.**

a.   **Batch Enroll**

___   Site personnel may define text to print notification letters.

___   MCP Forms Text file (#8560) has additional entries added to store text to be displayed in the Renewal and Disenrollment Notification Letters.

___   Site can now identify beneficiaries and mail Renewal Notification Letters before their enrollment expires.

___   Alphabetic Enrollment Warning Message. The user has to elect to sort the roster by Unit ID Name or by Patient Category and by date range.

___   Review UIC/PCM links to ensure they are correct.

___   Run IMER report post load to identify enrollees for Renewal.

___   Run the BMER, PMER options if sites desires.

b. **Change in Eligibility Warning Message**

____ When a patient is selected in MCP, logic is introduced
to determine if there is an Entitlement Discrepancy
based upon either the on-line DEERS eligibility check
or the stored current DEERS eligibility information.

____ A one character is added to the MCP Patient file to
record the Entitlement Discrepancy code. The
Discrepancy screen is displayed whenever an entitlement
discrepancy is detected. Users see this screen more
often.

c. **Convert Existing Enrollment Data**

____ **Change the DMIS ID code for current MCP enrollees to
match the DMIS ID attributed to the enrollee's
Enrolling Division**. Update Enrollment transactions are
sent to DEERS.

____ The user is better able to identify the division
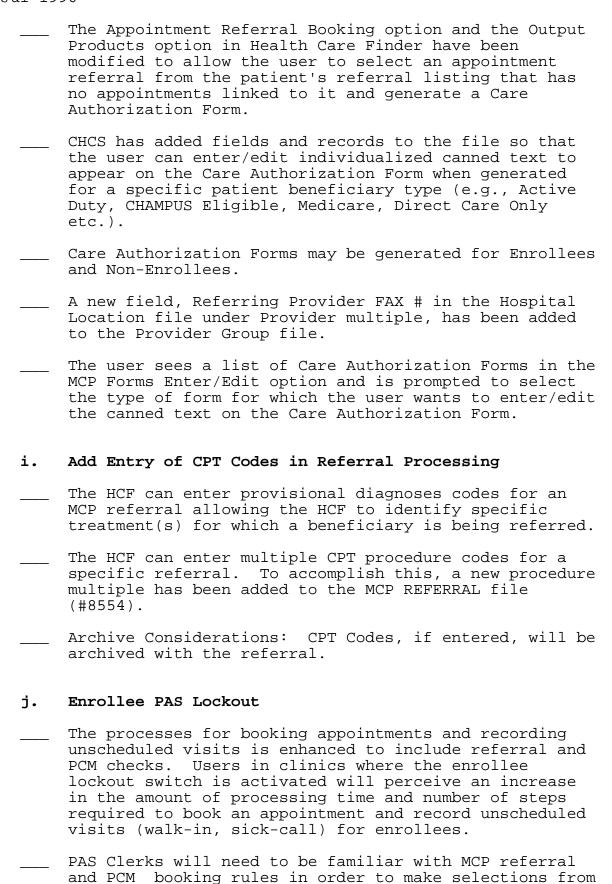responsible for the patient's enrollment. All routines
which send enrollment/disenrollment transactions are
modified to use the new transactions designed by DEERS.

____ There will be a temporary increase in the number of
enrollment transactions sent to DEERS.

____ This option uses the security key CPZ PARAMETERS.
After installation of Version 4.51, sites will be
unable to change the MCD DMIS ID without Support Center
assistance.

____ The Site should be review the DMIS ID Codes to ensure
they are correct.

____ **Users must sign on to the Division in which the
enrollee's unit/PCM** resides. Users must have access to
all Divisions for any enrollment/**disenrollment process.**

d. **Update Active Duty Enrollment End Dates**

____ System initiates a tasked job once a month to identify
those active duty(AD) enrollees whose enrollment ends
during the following month and batch DEERS eligibility
transactions for them.

____ Once a Year, system initiates a tasked job to identify
those active duty enrollees whose enrollment start date
is more than 3 years in the past. The system batches
any found for action. A flag is set for each patient
warranting the annual check so that the subsequent
response can be checked for UIC changes. For all

active duty responses, the end enrollment date is changed to the end eligibility date received from DEERS.

____ A one character code is added to the enrollment records and two date fields have been added to the MCP Parameters file.

e.   Display ACV, DMIS ID, PCM in Registration

____ A display screen is added to mini-registration displaying eligibility status for an enrollee/empaneled in MCP. All users can now see a patient's enrollment status.

f.   Appointment Cancellation

____ CHCS records in the Patient Appointment file (#44.2) the staff member canceling the appointment and the date/time the appointment was canceled. This appointment information is displayed on the PATIENT APPT DATA screen in End-Of-Day Processing Enter/Edit in PAS.

g.   Appointment Refusals

____ The Health Care Finder can enter appointment refusals for enrolled and non-enrolled patients through the PCM Booking Appointment Referral Booking and the Non-Enrolled Booking options.

____ CHCS allows the Health Care Finder to enter appointment refusals for primary care and/or specialty care for all MCP patients from a separate menu option in the Health Care Finder Menu. This allows the HCF to enter appointment refusals without having to enter a referral for enrollees, and to view all previously entered appointment refusals for the specified patient without having to generate the Appointment Refusal Report.

h.   Modify Care Authorization Form

____ Allows HCF to generate Care Authorization Forms without booking appointments. Enter/Edit the correct text on the CAF for a specific patient beneficiary type.

____ Sites may now print the MCP Care Authorization Form whether or not an appointment has been booked for the specified referral.

____ The Appointment Referral Booking option and the Output Products option in Health Care Finder have been modified to allow the user to select an appointment referral from the patient's referral listing that has no appointments linked to it and generate a Care Authorization Form.

____ CHCS has added fields and records to the file so that the user can enter/edit individualized canned text to appear on the Care Authorization Form when generated for a specific patient beneficiary type (e.g., Active Duty, CHAMPUS Eligible, Medicare, Direct Care Only etc.).

____ Care Authorization Forms may be generated for Enrollees and Non-Enrollees.

____ A new field, Referring Provider FAX # in the Hospital Location file under Provider multiple, has been added to the Provider Group file.

____ The user sees a list of Care Authorization Forms in the MCP Forms Enter/Edit option and is prompted to select the type of form for which the user wants to enter/edit the canned text on the Care Authorization Form.

i.   Add Entry of CPT Codes in Referral Processing

____ The HCF can enter provisional diagnoses codes for an MCP referral allowing the HCF to identify specific treatment(s) for which a beneficiary is being referred.

____ The HCF can enter multiple CPT procedure codes for a specific referral. To accomplish this, a new procedure multiple has been added to the MCP REFERRAL file (#8554).

____ Archive Considerations: CPT Codes, if entered, will be archived with the referral.

j.   Enrollee PAS Lockout

____ The processes for booking appointments and recording unscheduled visits is enhanced to include referral and PCM checks. Users in clinics where the enrollee lockout switch is activated will perceive an increase in the amount of processing time and number of steps required to book an appointment and record unscheduled visits (walk-in, sick-call) for enrollees.

____ PAS Clerks will need to be familiar with MCP referral and PCM booking rules in order to make selections from

referral picklists and informed decisions when choosing
to override.

k.   Block USTF Enrollee

____ PAS Clerks, Supervisors, and MCP Health Care Finders
now see USTF alert messages when USTF enrollees are
identified. They are prompted to discontinue or
proceed with the transaction.

l.   MCP Archive

____ Will not impact the average user.

m.   Provider Network Enhancements

____ Patient Types will change as will the enrollment mix.

____ MCP will receive an additional level in restricting
capacity for PCM assignments.

____ Run Management Reports pre and post load to contrast
differences

n.   Provider List

____ Users may now limit provider searches by Provider name,
MTF, External, or non-network providers in any MCP
booking option.

____ Watch codes only appear on the action bar if a provider
is on watch and the user has pressed F9 to view Place
of Care information, Assignment limits and Preferences.

B.2.5 <u>PAD.</u>

Before the install:

____ Run the MSA and TPC Active Accounts Receivables (AAR) the
day prior to the software load.

____ Run the MSA Balance Check the day prior to the software
load.

____ Sites will want to establish Standard Operating Procedure
for the possible utilization of the Casualty SIDR Menu
option.

____ Sites can make good use of Post Master Mailman Messages in
order to emphasize key changes which will affect the users

after the software load, i.e., Medical Hold no longer being
a valid Absent Status option, MASCAL Admission changes,
Patient Insurance Information screen changes, etc.

___ Prior to the software load, sites should print off copies of
any and all PAD reports which might be affected by the new
software. Sites should be sure to include Report 460,
"Number of Dispositions and Days by Diagnosis Related
Groups" and Report 462, "Number of Dispositions and Days
Data by Department."

___ If the site decides that the MASCAL Menu option will NOT be
used by all PAD clerks, the existing option DG ADMISSION
MASCAL should be added to all PAD clerks' Secondary Menu in
order to assure that all necessary personnel have the
ability to process MASCAL Admissions should the need arise.
By taking this action prior to the load, the time required
for PAD File and Table will be greatly reduced.

During the install:

___ Track all PAD/MSA activity to be backloaded when the system
is returned to the users.

B.2.6 PAS.

a. Enrollee Lockout

___ Prior to the upgrade, decide if Enrollee Lockout option
will be used. Determine who will make this decision:
the site, a lead agent or other POC.

___ If Enrollee Lockout IS NOT used, set all "Enrollee
Lockout:" fields in the clinic profiles to NO. There
will be no impact to users.

___ If Enrollee Lockout IS used, additional questions must
answered prior to the upgrade:

___ Which clinics will use Enrollee Lockout? All?
Some? Which ones?

___ Who will train users?

___ When will training be conducted? (Training will be
dependent on site having a Version 4.51 Training
Database)

___ What will the policies be regarding the use of
Override Codes for non-PCM appointments? Non-
Referral appointments?

b. Block USTF Enrollee

____ What will be the policy when users are alerted that the
patient is a USTF Enrollee? Proceed or Quit?

c. Unit/Ship ID Look Up

____ If the site decides to create and utilize a Primary
Station/Unit list, several questions must be answered:

   ____ Who will be responsible for compiling this list?

   ____ Who will enter this list into the CHCS Common
   Files?

   ____ Who will maintain (Enter/Edit) this list? How
   will they know when changes need to be made?

   ____ How will users be informed of this new feature?

B.2.7 PHR.

The impact of Version 4.51 will depend largely on how the site is
currently using the software and/or whether they can utilize any
of the new enhancements offered. Version 4.51 will have little
impact on how some pharmacies do business; other pharmacies will
see significant changes.

If the Dispensing Option is used:

____ Pharmacy users should be encouraged to mark Rxs noncompliant
through the DRX option rather than through the NON option.
This groups noncompliant RXs for the physician's mail
message. If an RX is marked noncompliant through the NON
option, separate mail messages generate for each one marked,
which may be bothersome to physicians.

____ Because the Dispensing Option is activated at the **Division**
level, it is enabled for all pharmacies in that Division.
The site should be aware of this. If only one pharmacy
within a Division desires to use it, other pharmacies don't
have to, but their RXs will appear on the dispensing screen.

____ Caution sites in disabling the Dispensing Option once it has
been enabled. All dispensing data disappears upon
disabling.

If a site employs multiple ATC machines:

____ A Unit Dose site will not attach to more than one ATC device
at a time.

____ Post-installation, check the parameters for each Unit Dose
Site and the attached ATC device. Make sure that the
correct ATC machine is attached to each Unit Dose room.

**If an OCA site wishes to create multiple inpatient
formularies:**

____ The Formulary Group that exists pre-load is replicated by
the system with the installation of Version 4.51. This will
be the default Inpatient formulary. If the site wishes to
establish multiple inpatient formularies in addition to the
default, these will have to be built. Until such time as
they are ready for use, the default inpatient formulary can
continue to be used by all Divisions.

Enhanced dosage checking functionality:

____ The system will now accommodate "MG" and "ML" SIGs for
dosage checking. The site may want to reconsider activating
dosage checking if they have not been using it. The system
still will not compute dosage checks based on patient's
weight.

____ For sites that had dosage checking activated prior to
Version 4.51 on their ordered drugs, there may be an
increase in the amount of clinical screenings generated.
The system is now doing a more thorough job of checking
dosages.

Workload Accounting:

____ CHCS will now be gathering workload for PERFORMING MEPRS
work centers, including Pharmacy. Some changes must be made
to the Department/Service File, the Hospital Location File,
and the MEPRS Code file to define each pharmacy as a work
center. These file changes will be transparent to the
pharmacy user.

If DEERS checks are being done by Pharmacy:

____ If an outpatient pharmacy site has the DEERS check enabled,
users should be aware that the DEERS field on the outpatient
label will now only print an "I" if the patient is
ineligible for care. No more ineligibility codes will print
on this label.

____ An ineligibility reason no longer displays on the screen in
the DEERS Eligibility Check (DEC) option and the DEERS
Eligibility Display (DED) option. The field previously
called "DEERS Code" is now called "Direct Care" and contains
only the words "Eligible" or "Not Eligible."

____ If the pharmacy registers patients, a new screen displays
after the first input screen if the patient is enrolled in
the MCP - Managed Care Program.

____   Inform pharmacies that use the nightly-run Pharmacy DEERS
        Ineligibility Report that it will no longer supply the
        reason for a patient's ineligibility. If a discrepancy code
        is supplied by DEERS, the reason will be displayed.

        Customized outpatient labels:

____   If the site must adapt their outpatient labels to
        accommodate special needs (interface with electronic
        devices, etc.) a user on site must have FileMan enter/edit
        access to define the needed print templates.

B.2.8 RAD.

____   Two-hour demonstration should be scheduled for all users.
        Demonstration should be limited to an audience of ten (10)
        per session.

B.2.9 WAM.

The following is a checklist of 4.5 Implementation activities
surrounding the preparation and initial activation of the WAM
interface.

Pre-Load:

____   Demos and Training of WAM is complete.

____   Ensure DMIS ID and other Common Files are correct before WAM
        activation. This includes MEPRS Codes and Hospital
        Locations.

____   Print and Verify ASD, SAS Detail and Master Element Tables.
        Make all necessary changes in the EAS and STARS/FL systems
        prior to WAM Initialization to ensure accuracy in files for
        transmission to CHCS.

____   Run MEPRS-related reports for all functionality that collect
        Workload prior to Initialization of WAM. This is a one-time
        only procedure. (See WAM IG for further details.)

____   Ensure each CHCS subsystem reporting workload has accurate
        MEPRS Codes built for locations.

____   Determine what workload data will have to be entered
        manually on WAM templates.

____   Obtain EAS and STARS/FL IP Addresses from EAS and STARS/FL
        POCs. These will be used for the ETU.

Post-Load (pre- or post-user):

____ WAM user setup. Verify that appropriate Menu options, FileMan codes, Security keys are issued to WAM users.

____ Activate the WAM module in the System Definition Parameter in WAM Option 5. Set other parameters in this file for your site.

____ Verify that EAS files (ASD and SAS Detail) have been transmitted to CHCS.

____ **NAVY:** Load the STARS/FL Master Element File in CHCS from diskette.

____ Initialize and set Taskman tasks for WAM. **IMPORTANT:** Specific directions for WAM activation sequence must be followed. Do not schedule any of these options to run by division.

____ Review exceptions reports for your division. Corrections will generally be accomplished in the division's EAS system. Changes are then present and reprocessed by CHCS. (See exceptions report description.)

____ Initialize workload templates from the month. This is done in batch per division in the WAM option: Manage Workload Templates (Option 4).

____ Enter SAS (and for Navy CAC/JON) POCs in DWAM options if delinquency bulletins are desired at your site.

____ Verify that Pharmacy F/T Build for Performing MEPRS is complete. (See Common Files IUG or WAM IG for further details.)

B.3   INTEGRATION ISSUES.

B.3.1   CLN.

____ CLN/LAB/RAD: If Due Lists are implemented, verify with the Lab POCs that a list of collection samples are being logged and with the Rad POC that patients are logged in as they arrive in Radiology.

____ CLN/LAB: Confirm that the Lab has made the appropriate entries in their files for blood orders and autologous donations. It might be beneficial for them to provide special instructions, if appropriate, to those providers who will be ordering these types of tests.
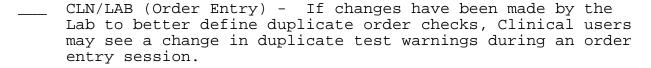
____ CLN/LAB: Confirm that the Lab has completed/canceled Collection Lists, Transmittal Lists or Work Documents for pre-Version 4.51 blood tests.

____ CLN/LAB: Lab and Clinical POCs should determine that the Lab parameters are appropriate for duplicate test warnings on lab tests as necessary.

____ CLN/PAS: Confirm that the Workload Assignment Module (WAM) is functional. Discuss with the PAS and CLN POCs the importance of scheduling appointments correctly for provider appointment link in ordering and workload data.

____ CLN/PHR: Determine if Providers enter inpatient medication orders. Verify with the Pharmacy POC that the appropriate inpatient divisions are associated with correct inpatient formularies.

____ CLN/PHR: Determine if the Pharmacy will activate the dispensing notification option. If they are, then the Pharmacy POC may notify Clinical POCs of this feature. Inform providers of non-compliance mail bulletin feature as well.

____ CLN/PHR: Confirm that Pharmacy has enabled the Min/Max Dosage Check and, if so, for which drugs. Notify Clinical users of any changes to screening. CLN and PHR may need to work together on making new default sig codes with MG and ML units for some drugs.

____ DTS/LAB: Inform the DTS/LAB POCs of the Abnormal Clinical Chemistries of Interest Report which will identify lab tests of interest to be used for dietary consultations.

____ DTS/PAD: If NMIS is interfaced with CHCS notify PAD/DTS POCs of demographics information sent to NMIS from CHCS.

____ DTS/PHR: Inform DTS POC of the capability to identify medications of interest for dietary consultations.

____ PWS/CIW INTERFACES: If these system interfaces are in place at sites, the site will be able to gather workload reporting data based on inputs into CHCS.

B.3.2 COMMON FILES.

Applications Programmer Interface

____ Initial CHCS/external server Integration External Interface: This interface will be available for use between CHCS and external systems. It allows for bi-directional communication between systems. It is the responsibility of the external server system to implement the integration by processing the received CHCS master file entries.

B.3.3 **LAB.**

____ CLN/LAB (Order Entry) - If changes have been made by the
Lab to better define duplicate order checks, Clinical users
may see a change in duplicate test warnings during an order
entry session.

____ CLN/LAB: DBSS - *New* Blood Products. The availability of
BLOOD PRODUCT TYPEs on CHCS affect Order Entry. The
Laboratory and may want to send a memorandum (across all
divisions) to members of the medical staff to provide a list
of the Blood Product Types available.

____ CLN/LAB: DBSS - ORDER SETS. Be sure a message is sent to
Clinical and LAB users to announce the new BB tests coming
as a result of Version 4.51 Interface with DBSS. "After the
load, Order Sets will need to be edited to remove any and
all Blood Bank types of tests, & then add new DBSS Blood
Bank tests." This should be published twice: Once two (2)
weeks pre-Load and again after the Load.

B.3.4 **MCP.**

MCP/ALL:

____ REGISTRATION DISPLAY UPDATE (ACV, DMIS ID) - All
functionalities will see an additional screen when
accessing an enrollee's mini-registration.

MCP/PAS:

____ ENROLLEE LOCKOUT - PAS booking clerks will see new screens
and will be unable to book appointments for MCP enrollees
unless certain conditions are met or the lockout is
overridden. Users will have to be familiar with MCP booking
rules. The Site must establish whether this option will be
utilized.

____ APPOINTMENT CANCELLATION - PAS users are able to cancel MCP
entered appointments and their names and date/time of the
cancellation now will be stored in the Patient Appointment
file.

____ APPOINTMENT REFUSAL - MCP users will be able to enter an
appointment refusal from PCM Booking or from a new separate
Appointment Refusal Enter/Edit option on the HCF Menu.

____ ADD CPT CODES - PAS users or any user with access to viewing
appointment referrals must be familiar with CPT and ICD9
Codes.

___ BLOCK USTF ENROLLEES - Primarily a PAS option and documented in the PAS IUG.

MCP/SYSTEMS:

___ MCP ARCHIVE - System Administrator should be familiar with the archiving process. The Site must establish policy regarding archiving if it is activated. Since MCP is CPU intensive, sites may decide to consider this option. If the site decides to archive MCP data on an MCP patient, a notation is made on the demographic display screen indicating there is archived data.

B.3.5 <u>PAD.</u>

___ PAD/CF: Confirm that all Common File data related to PAD is entered.

___ PAD/ALL: If MASCAL options containing other functional areas will be utilized, coordinate with other functional POCs.

B.3.6 <u>PAS.</u>

___ PAS/MCP: MCP must be in use at the site for Enrollee Lockout to work.

___ PAS/PAD: In order for the block on USTF Enrollees to work, a link must be established between CHCS and DEERS.

B.3.7 <u>PHR.</u>

PHR/CLN:

___ If the site is using the Dispensing option, pharmacy needs to communicate the impact on physician/nurse users. The POL displays RX dispensing information and mail messages are generated if RXs are marked noncompliant.

___ Multiple inpatient formularies will be used only at OCA (Overlap Catchment Area) sites. For those sites wishing to establish multiple formularies, some standard operating procedures will need to be set up with the physicians on how/whether to order non-formulary items. The system will not restrict them from ordering a drug as long as it is formulary for at least one Formulary Group in the MTF.

In addition, some order sets with inpatient orders may need editing to conform to changes in pharmacy duration parameters. For example, prior to the Version 4.51 load, a physician may have an order set containing a MED order with

a duration of "99" days. If the inpatient formulary is revised after the load so that order now has a duration of "10," the order will not go through and a message displays to notify him/her that the duration exceeds 10 days. To prevent this, the order set needs to be modified.

____ If Min/Max Dosage Checking is enabled: Physicians who order RXs should know that they can now enter "MG" and/or "ML" in a SIG and the system will correctly screen for proper dosage parameters. Many sites do not enable this parameter of drug checking. For those that do, it is usually enabled only for particular age groups and drugs.

____ Physicians may need to adjust some SIGs on orders in their Order Sets if the site does dosage checking.

____ Physicians should also be aware that there are some changes to the SIG Code list: FLA, D16-25, and 4THS.

B.3.8 RAD.

Provide the Clinical Subsystem with an updated list of Exam Statuses and corresponding definition.

B.4 FILE AND TABLE CHANGES.

B.4.1 CLN.

There is no CLN file/table build for Version 4.51.

B.4.2 COMMON FILES.

Pre-load:

____ No file/table changes.

Post-load:

____ Zip Code file: If sites have any zip codes for which they wish to enter a Modified City, they may do so post-load. Estimated time: 1 minute/zip code.

Workload Assignment Module (WAM)

____ The site system manager or an authorized user may enable/disable the NASDI workload reporting and data transfer process by setting the WAM functionality on/off switch in the System Definition Parameters option menu. The site system manager will give users the WAM option by tailoring the user's profile via the User Management Menu.

The WAM menu will be locked by the security key of [DGNAS USER] and only be available for users assigned with this key.

Menu path: CA (Core Application Drivers Menu) --> WAM

____ After user selects the "WAM" option, the Workload Assignment Module Menu is displayed as follows:

    1   Edit Workload
    2   Report Workload Menu
    3   Display Exceptions Report
    *4   Manage Workload Templates
    *5   System Definition Parameters
    *6   Create Monthly Workload ASCII File to EAS
    *7   Create Monthly Workload ASCII File to STARS/FL

    * - this option requires Supervisor Level Security Key.

NASDI SITE SYSTEM DEFINITION

The facility coordinator or an authorized user may enter values for the following type site specific parameters:

____ WAM Functionality Activation - A value of YES or NO can be entered by the user to determine whether the WAM functionality will be activated for a division. If NO is entered, no other WAM system definition parameters, described in items b through e, can be specified by the user. The default is NO.

____ Workload Deviation Range - A value of YES or NO can be entered by the user to specified whether the site/division wants workload deviation to be flagged. The default is NO.

If YES is specified, a value within the range of 15% - 25% can be entered to indicate that site acceptable level of workload deviation amount, in percentage, between the current reporting month and the previous reporting month. The default value is 15%.

____ Workload Data Generation Frequency - A value of YES or NO can be specified for the division to determine if a division specific WAM workload data generation frequency is needed. The default is NO. The value NO indicates that no frequency is specified and the workload data generation will be performed at the End of Month+1.

IF YES is specified, A value between 7 - 15 (days) can be entered to indicate the frequency of workload data generation for the NASDI editing template default data. The default value will be zero which indicates that no workload data will be automatically generated until End of Month+1. Due to the amount of processing to be caused by the data

generation, the workload data compilation will be initiated at 2 a.m. of the scheduled day.

____ Workload Data Delinquency Allowance - A value of YES or NO can be specified for the division to determine if the WAM workload data delinquency processing is needed. The default is NO or null.

If YES is specified, a value of 1 - 28 (days) can be entered by the user to indicate that this many days after the template status is set to "I" (initialized) the workload data editing action is now considered to be delinquent and a delinquency bulletin may be issued. The delinquency status is activated x days after End of Month+1. The default value is 5 days or per service specific guidance.

____ Delinquency MEPRS E-Mail Bulletin - A value of YES or NO can be entered to indicate that if workload reporting delinquency bulletin should be automatically generated. The specification of a Workload Data Delinquency Allowance, whether by default or not, will invoke the automatic generation of this Bulletin.

____ Enter the site specific NASDI processing parameters:

Menu Path: CA>WAM>5   System Definition Parameters

Set each value to YES or NO. The absence of a value in the Value field indicates that the parameter is disabled.

B.4.3 <u>LAB.</u>

DWC II

For changes in the Lab Test file and Lab Method files, there is <u>no required F/T activity</u> to go "live". (See item below under POST-LOAD)

CPT (All)

There are file structure changes in the Lab Test file and Lab Method file to enable the new functionality. There have been changes made to file #8151 as of October 1, 1995. For these changes, there is <u>no required</u> F/T activity to go "live". (See items below under POST-LOAD)

DBSS

There are new lab tests introduced into CHCS by the conversion. <u>Required Lab F/T</u> activities will need to be done by the site as described below (both PRE & POST LOAD).

BLOOD PRODUCT TYPE

After the Version 4.51 load, lab users will have the opportunity to inactivate BLOOD PRODUCT TYPE entries which are not available at the site and to define synonyms for remaining entries. This F/T activity is <u>not required</u> to go "live", but <u>is strongly recommended</u> to simplify order entry and prevent inappropriate blood product type choices. (See item below under POST-LOAD)

- **<u>PRE-LOAD</u>**

____ (1) An Ad Hoc (see Appendix H) should be run by the site to identify all blood bank type tests presently used on CHCS for later reference. {Est 20 min}

____ (2) An Ad Hoc (see Appendix H) will need to be entered and run to identify Order Sets and Orderset Entities associated with the 'outgoing' BB tests to reference. {Est 60 min - run after hours}

____ (3) Using Lab's LTE menu option (LAB->ELA->LTA->LTE) inactivate all blood bank tests by changing TYPE to NEITHER. The previous Ad Hoc listing these tests could make this easier. {Est 15 min}

____ (4) Unacknowledged Orders. Enter and run the Ad Hoc (see Appendix H) to identify and list all orders in monthly increments that will need to be canceled (those orders that were placed on CHCS and NOT accessioned). {Note the importance of first cleaning any and all Collection and Transmittal Lists.} {Est 3 hrs - run after hrs}

- **<u>POST-LOAD</u>**

____ (1) {DBSS} Using Lab F/T Menu Option (LSE), users will need to create a new Lab Section, such as BLOOD BANK DBSS with a BB subscript for the New BB subscripted Accession Area(s). {Est 10 min}

____ (2) {DBSS} Using Lab F/T Menu Option (AAE), users will need to create one or more **Division Specific** Accession Areas as needed for the New BB subscripted Lab Tests. {Est 10 min}

____ (3) {DBSS} A new entry should be made in the Topography Field file for AUTOLOGOUS DONATION. This entry will serve as the Default Specimen for the next listed task. {Est 5 min}

____ (4) {DBSS} Using Lab F/T Menu Option (CSE), users will need to create a new Collection Sample for use when defining the new BB Lab Test AUTOLOGOUS DONATION. {Est 5 min}

____ (5) {DBSS} Using the 'outdated BB test list' generated PRE-Version 4.51 as reference, update the new BB tests. {Est 1 hr}

____ (6) {DBSS} Re-run Ad Hocs on ORDER SET and ORDERSET ENTITY files to verify corrections have been made. {Est 60 min - run after hours, prn}

____ (7) {DBSS} Re-enter any canceled BB orders as needed. {Est 30 - 60 min}

____ (8) {DBSS:Blood Product Type} Verify F/T Maintenance completion to inactivate BLOOD PRODUCT TYPE entries that are not available at the site and to define synonyms for remaining entries. {Est 30 min}

____ (9) {DWC-<u>optional</u>} Verify Lab Test File/Table Maintenance activity is appropriate for the newly created fields regarding priority, duplicate order check, overdue time, lab print name and lab print order. This is <u>not required to go live</u>. {Est 1-2 hrs}

____ (10) {CPT-<u>optional</u>} Verify Lab F/T Maintenance activity is done to update entries in the lab test file (Path Consult = YES) matches the corresponding entries in the CPT/HCPCS (#8151) file now defined to allow capture of workload for pathology consult. This is <u>not required to go live</u>. {Est 1 hr}

____ (11) {CPT-<u>optional</u>} Verify File/Table Maintenance activity is complete for Common Results entries in the Lab Division file defined to exclude capture of workload for tests not performed. This is <u>not required to go live</u>. {Est 10 min}

____ (12) {CPT-<u>optional</u>} Verify File/Table Maintenance activity is done to update entries in the Lab Method file that have unique Site/Specimen CPT Codes. This is <u>not required to go live</u>. {Est 10 min}

B.4.4 <u>MCP.</u>

All of the following are Post-Load (Post-User):

    a.   Batch Enroll/Disenroll

    ____ Populate the new MCP Parameters fields for Batch times and dates post load. Est time: 10 minutes

    ____ Review MCP Letter formats & reformat if desired. Est time: 1 hour.

    ____ Review UIC/PCM links for correctness. Est time: 1-3 hours.

    b.   **Enrollee Lockout**

___   Review ENROLLEE OVERRIDE CODE file and add new entries if desired. Est. time: 30 minutes (if activated)

    c.   **Modify Care Authorization Form**

___   Enter/Edit Care Authorization forms. Est time: 2 hrs

    d.   **Add CPT Codes**

___   Site costs may be added through Common Files if desired. The Site may look to DOD for guidance as to whether these fields should be populated, how to determine the cost to load, and related policies. Est time: 1-2 min/per CPT code.

    e.   **MCP Archive**

___   Archive parameters should be entered if the Sites desires to activate. Est time: 15 minutes

B.4.5 PAD.

Post-load PAD File and Table changes:
Estimated time: 10-20 minutes

___   Populate the new Last MASCAL ID # field found in the divisional PAD Parameters.

    Menu Path: PAD=>SDM=>PAR

___   If site has opted to use the new MASCAL Menu Option, assign new DG MASCAL USER Security key to all PAD users responsible for entering MASCAL admissions into the system.

B.4.6 PAS.

All of the following are Post-load (Post-User):

    a. Enrollee Lockout

___   Two new fields have been added to the PAS Clinic Profiles for Enrollee Lockout. They are "Enrollee Lockout:" and "Type of Care:". The Enrollee Lockout field is required, and if it is set to "YES", then the Type of Care field is required also. Users with the PAS Supervisor menu will input enrollee lockout switch

(Y/N) and type of care (Primary/Specialty/Both) in the
clinic profiles. This must be done post-install.
Estimate time: 1 min/clinic.

____ Five standard override codes have been added to CHCS,
and may be found in the MCP Enrollee Lockout Override
File. This file may be added to by the Managed Care
Department, but the standard codes may not be changed
or deleted.

____ There is a new field in the Patient Appointment file
called Appointment Override Code. This field will
store any override code that may have been issued when
a patient encounter was booked or added through USV.

b.   Clinic Profiles

____ One new field, "Clinic Phone:" now appears in BOK, USV,
and CBP. The clinic phone number must be entered into
this field in the clinic profiles in order for it to be
displayed in options on the Clerk Scheduling Menu.

B.4.7 PHR.

Pre-Load:

There are no Pharmacy file and table changes that need to take
place before the system goes down.

Post-Load:

____ For any ATC drugs added after the upgrade, a new field
appears in the ATC Drug Location File (#50.4). The field is
CANISTER and is either set to ENABLED or DISABLED.

____ The system now accounts for "MG" and "ML" when it is used in
a SIG and will do appropriate dosage checking on those units
of measure. These units were added to the Medication
Instruction File (#51).

____ Default SIGs may need to be rewritten with the enhanced
functionality of dosage checking to include SIGs written
containing "MG" and/or "ML". Est. Time will vary depending
on the number of SIGs requiring revision.
Est. time: 5 min./SIG.

____ If the site wishes to format their own outpatient labels,
they can do this after the system is returned to the user.
A Secondary Menu option is available to make this easier
than it has been in the past. In the past, sites had to
utilize GT namespace software to accomplish this. Est.
Time: .5 hr.

B.4.8 RAD.

There is no File/Table build required for the Radiology subsystem in Version 4.51.

B.5 SECURITY KEYS.

B.5.1 CLN.

There are no new security keys in Version 4.51 for CLN.

B.5.2 COMMON FILES.

There are four new security keys associated with WAM:

DGNAS USER: This key is used to lock the WAM option in the Core Application Menu (CA). This should be assigned to a WAM user.

DGNAS NAVY USER: This key is used for the NASDI application in creating STARS/FL ASCII Files.

DGNAS MANAGER: This key issued for the NASDI application in managing Workload Templates, defining System Parameters, and creating EAS III ASCII Files. This is for a WAM Supervisor.

DGNAS NAVY MANAGER (for STARS/FL reporting): This key is used for the NASDI application in creating STARS/FL ASCII Files. It is for a WAM Supervisor.

B.5.3 LAB.

LR RETAR: Allows lab user to re-transfer autoinstrument data for reprocessing.

The ability to re-transfer autoinstrument data was formerly restricted to lab users holding the LRSUPER security key. This new key allows better managerial control for assignment of this supervisory level key.

B.5.4 MCP.

CPZ ENTITLEMENT CLEAR: Should be given to users enrolling or disenrolling MCP patients and who may need to clear discrepancies received from DEERS.

CPZ RENEW DIS BATCH: Locks menu option MENR in EMCP (Enrollment Menu). Used to identify potential renewal or disenrollment candidates, notify them, and/or do BATCH re-enroll/disenroll. Should be Assigned to designated Enrollment clerks or supervisors.

CPZ LOWCAP: Should be assigned to users who will manage provider networks. This key allows users to enter a capacity for an MCP provider that is lower than the number of assigned beneficiaries.

The following keys associated with Watch Codes will **not** be activated at this time:

QAWATCH1: Assigned to FQA personnel who may place a provider on Quality Assurance Review or remove the Provider from QA Review.

QAWATCH2: Assigned to FQA Personnel who may view data of those providers currently on-watch/off-watch but may not place a provider on watch or remove them from being on quality assurance review.

QAWATCH3: Assigned to FQA personnel so that the Assign Watch Codes option and the Provider Watch Code Menu options appear on menus.

B.5.5 <u>PAD.</u>

DG MASCAL USER: Locks access to all options found within the new MASCAL menu option. This key should be given to any all users who would be called upon to enter admissions during a MASCAL emergency.

SID CASUALTY: Locks all access to the new Casualty SIDR Menu option. This key should be given to any/all Clinical Records or PAD personnel who will be responsible for entering Casualty SIDR information into the system

B.5.6 <u>PAS.</u>

There are no new security keys required for PAS in Version 4.51.

B.5.7 <u>PHR.</u>

PS SITE SPECIFIC LABELS: This should be assigned infrequently, and only at those sites that wish to customize their outpatient labels.

B.5.8 <u>RAD.</u>

There are no new security keys required for RAD in Version 4.51.

****

APPENDIX C:

TRAINING AND FILE/TABLE BUILD MATRIXES

****

This page
has been left blank
intentionally.

TRAINING MATRIX (Version 4.51)

	Demos	Hours	Users	Training	Hours	Users	Handouts*
CLN	Y	1-1.5	CLN O.E. & POCs	N	-	-	Y
COMMON FILES	N	-	-	N	-	-	-
DTS	Y	1	DTS POCs	N	-	-	Y
LAB	Y	2-3	LAB POCs	N	-	-	Y
MCP	Y	6	MCP/PAS POCs	Y	4	HCF/PAS CLERKS MCP	Y
MSA	Y	1	MSA POCs	Y	2	MSA POCs/ CLERKS	Y
PAD	Y	2	PAD POCs/	Site Specific	-	PAD CLERKS	Y
PAS	Y	4	PAS POCs	Y	2-4	PAS POCs/ CLERKS	Y
PHR	Y	.5-1	PHR POCs/ TECHS[1]	N	-	-	Y
RAD	Y	2	ALL RAD	N	-	-	Y
WAM	N	-		Y	-	-	-
WAM	-	-	WAM POCs	Y	5	-	N
WAM	-	-	WAM CLERK	Y	5	-	N
WAM	-	-	WAM SUPERVISOR	Y	8	-	N

* Handouts may be used to supplement demos/training or, in some cases, be used in lieu of training. See the training section of the IUG for more specific recommendations on training. Appendix E includes the familiarization training plan.

1/ PHR Techs training would only include the Dispensing Option demo (if the site uses this feature).

FILE AND TABLE BUILD (Version 4.5)

	PRE LOAD	TIME	POST LOAD (PRE-USER)	TIME	POST LOAD (POST-USER)	TIME
CLN	N/A	-	N/A	-	N/A	-
CF (WAM)	DC/FT	1 Wk.	N/A	-	FT	1 Hr.
LAB	FT	4.5 Hr.	FT[1]	4 Hr.	FT[2]	1-2 Hrs.
MCP	N/A	-	N/A	-	FT	6 Hrs.+ [3]
PAD/MSA	5-10 Min.	-	FT	10-20 Min.	N/A	-
PAS	N/A	-	N/A	-	FT	.5 Hr.
PHR	N/A	-	N/A	-	FT	.5 Hr.+ [4]
RAD	N/A	-	N/A	-	N/A	-
WAM	N/A	-			FT	.5 Hr.

Note: The File and Table Build estimates may vary. This is an estimated time line for planning purposes. Use the appropriate sections of the IUGs for detailed information.

DC = Data Collection   FT = File/Table

1 - DBSS F/T Build
2 - CPT/DWC (Optional) F/T Build
3 - Additional time required if CPT codes are entered with cost data (1-2 min/CPT code)
4 - Additional time required for SIG code changes (5 min/SIG)

****

APPENDIX D:

DATA COLLECTION FORMS

****

This page
has been left blank
intentionally.

Data Collection Forms

There are no data collection forms required to support the new CLN/DTS
functionality in CHCS software Version 4.5.

This page
has been left blank
intentionally.

****

APPENDIX E:

FAMILIARIZATION TRAINING PLAN

****

This page
has been left blank
intentionally.

Familiarization Training Plan

The Clinical changes with Version 4.5 will not require formal training of users. The following Training plan and data may be used to demo or train a class of 10 users on the Version 4.5 Training Data Base.

DEMO DATA:

E.1 <u>LAB/RAD DUE LISTS.</u>

The following plan may be used to demonstrate how the due list for lab or radiology results will appear in Version 4.5. The steps for printing the due lists have not changed, however manual entries will no longer be required, since the status of the labs/rads will be automatically generated from inputs in the Laboratory or Radiology.

NOTE: You may skip this section if your site does not use the Lab and Radiology Due List options.

a.Printing a Lab Due List

Log on using access/verify codes of NURSELAMP/NURSELAMPV. Enter the following menu path: NRS --> DOC --> DUE --> LAB DUE LIST

Enter the prompts as follow:

Collection Method: WARDCLINIC COLLECT// **ALL**
Select WARD LOCATION NAME: **10A**
FROM: 0700// <Return>
TO : 1459// <Return>
SELECT PATIENT: <Return>
DEVICE: HOME// <Return>

Point out the STATUS column which indicates whether the lab collection samples are PENDING, LAB LOGGED IN or LAB CANCELLED. See Appendix F for a sample Lab Due List report.

b.Printing a Rad Due List

Log on using access/verify codes of NURSELAMP/NURSELAMPV. Enter the following menu path:
NRS --> DOC --> DUE --> RD

Enter the prompts as follow:

Select WARD LOCATION NAME: **10A**
FROM: 0700// <Return>
TO : 1459// <Return>
SELECT PATIENT: <Return>
DEVICE: HOME// <Return>

Point out the STATUS column which indicates whether the patient has been ARRIVED IN RAD or if patient's arrival was entered in error (ARRIVAL ERROR).   See Appendix F for a sample Rad Due List report.

E.2 **MULTIPLE INPATIENT FORMULARIES.**

This functionality will only be used by OCA (Overlap Catchment Areas) sites, where separate inpatient facilities wish to define their own formulary.

The basic process for ordering a drug for an inpatient has not changed in Version 4.5. As before, a drug picklist will still appear from which to choose the correct medication for that patient.

Log on using access/verify codes DRLAMP/DRLAMPV. Use Patient Name HAVERSHAM,GRACE. Because this patient is inpatient, the ward location will show up as the default for REQUESTING LOCATION. Once in the Patient Order List (POL) screen, notice that Ward 8C has been clinically activated and orders may be entered for this patient.

Enter the prompts as follows:

ACTION: **NEW**
ORDER TYPE: **MED**
Select INPATIENT MEDICATION: **??**

The double question marks will provide a picklist of medications which may be ordered from the formulary. Complete the MED order as needed. Press **<Return>** two times to re-enter the POL. Type Q to quit the POL and activate the order and print order group if desired.

In Version 4.5, when a patient is admitted to an inpatient facility, the location of that patient determines which division and associated formulary is going to be available to the physician from which to order medications. A new formulary may be created by the Inpatient division (in a case when prior to the load one formulary was shared between multiple inpatient divisions).

If a particular drug is entered by the physician which is non-formulary or inactive in that formulary, at the time the drug is entered, the system will notify the physician that the drug is ** NOT STOCKED at Dispensing Pharmacy **.

The same physician may enter the same drug order for another patient at a different inpatient location in the OCA and if the formulary associated with the division for that patient's location stocks the drug, the physician will be able to complete the drug order for that patient.

E.3 **PHARMACY DISPENSING NOTIFICATIONS.**

The Pharmacy will be responsible for activating the Dispensing Option which will provide Clinical users with information regarding the status of an RX.

Log on using access/verify codes of DRLAMP/DRLAMPV. Use Patient Name NASON,LINDA and Requesting Location BHAA. Press <Return> at default

answer of YES// to confirm patient has an appointment. Press <Return>
again to confirm MEPRS Code of BHAA.

Enter the prompts as follows:

ACTION: **USR** (to setup display preferences/defaults for POL)

To show all orders for:

Inpatient Page: **A**
Outpatient Page: **A**

Display Online Help: **Y**

File the screen.

At the ACTION: prompt, press the Up Arrow cursor key to browse through
the list of orders. Notice that some of the RX orders will display
dispensing status messages which will appear as a highlighted portion
of the order. If the RX order has been completed by the Pharmacy, the
dispensing notification will indicate the date/time the RX was
dispensed.

E.4 <u>BLOOD LAB ORDERS AND AUTOLOGOUS DONATIONS.</u>

a.TYPE AND CROSS Lab Blood Order

Log on using access/verify codes of DRLAMP/DRLAMPV. Type **ORE** at the
menu option prompt. Use Patient Name NORRIS,LINDA and Requesting
Location BHAA. Press <Return> at default answer of YES// to confirm
patient has an appointment. Press <Return> again confirm MEPRS Code
of BHAA.

Enter the prompts as follow:

ACTION: **NEW**
Associate outpatient orders with NEW appointment in GENERAL MEDICINE
CLINIC 21 Jun 2001@0900? YES// <Return>
ORDER TYPE: **LAB**

CHOOSE DEFAULTS, or Press Return for Full Screen Entry (required for
Anatomic Pathology, Blood Bank, and all Continuous lab tests.)

DATE/TIME OF TEST (NOW, AM QAM or Date&Time): **<Return>**

Select LABORATORY TEST: **TYPE**
1TYPE AND CROSS
2TYPE AND SCREEN
Choose 1-2: **1**

1.BLOODRED TOP
2.WHOLE BLOOD   LAV

Choose 1-2: **2**

```
        NORRIS,LINDA        Age:28      20/222-333-4483    Laboratory Order
        TYPE AND CROSS      WHOLE BLOOD  Pt/222-333-4483        010621-03254
        ==================================================================
                      Date/Time Needed:       21 Jun 2001@0905
                      Start Date/Time:        21 Jun 2001@0905
                  Collection Method:      WARD/CLINIC COLLECT & DELIVER
                        Collection Priority:     ROUTINE
                        Processing Priority:     ROUTINE
                          Special Instructions:

        Product Type (Maximum of 1)              Units   Total Volume (ml)
        ---------------------------              -----   -----------------
                    RED BLOOD CELLS                              4
```

  NOTE: The RED BLOOD CELLS entry above may be chosen from a picklist of blood product
    types using **??** in that field. The Lab may set up synonyms for products for the
                                  picklist.

```
                       Substitute Product Allowed?:  NO
              "NO" = HCP will be contacted by phone if substitution is needed.

                    Reason for Transfusion/Diagnosis/Procedure:

           Help = HELP              Exit = F10              File/Exit = DO
```

To get a brief description of each of the prompts below, type a double
 question mark (??) which also explain what information is needed in
 the fields. Enter the prompts as follow for the continuing screen of
              the TYPE AND CROSS blood lab order:

```
        NORRIS,LINDA        Age:28      20/222-333-4823    Laboratory Order
        TYPE AND CROSS      WHOLE BLOOD  Pt/222-333-4823        010621-03254
        ==================================================================
                      Hospital Location of Transfusion/Procedure:
                                    10A
         History of Transfusion?:        YES        Date: 14 May 1988
                      History of Antibody Formation?:
                      History of Transfusion Reaction?:

           Previous/Current Pregnancy?:                      Date:
           Prior RHIG treatment?:                            Date:
                     Hemolytic Disease of Newborn?:

           Help = HELP              Exit = F10              File/Exit = DO
```

   While completing the fields in this screen explain the following:

   -The *History of Transfusion?:* field is to answer 'YES' or 'NO' to
 indicate if the patient has every received a blood transfusion.
 Leaving the field blank indicates that the history of transfusion is
                              unknown.

-The *History of Antibody Formation?:* field is a 'YES' or 'NO' field to
 indicate if the patient has had previous problem with blood antibody
                             formation.

-The *History of Transfusion Reaction?:* field is a 'YES' or 'NO' field to indicate if the patient has had a previous allergic reaction while a blood product was administered. Leaving this field blank indicates that there is no known history of transfusion reactions.

-The *Previous/current Pregnancy?:* field is a 'YES' or 'NO' field to indicate if the patient has been pregnant in the past or is currently pregnant. Leaving the field blank, indicates that the woman's pregnancy history is unknown.

-The *Prior RHIG Treatment?:* field is a 'YES' or 'NO' field to indicate if a RH-Negative mother received Rhogam during the pregnancy or after delivery. Leaving the field blank indicates that this is unknown.

-The *Hemolytic Disease of Newborn?:* field is a 'YES' or 'NO' field to indicate if a newborn of a RH-Negative mother developed hemolytic disease. Leaving the field blank indicates that this information is unknown.

-Explain that the type and screen order fields are the same as for type and cross.

b.AUTOLOGOUS DONATIONS Blood Lab Order

Log on using access/verify codes of DRLAMP/DRLAMPV. Use Patient Name NORRIS,LINDA and Requesting Location BHAA. Press <Return> at default answer of YES// to confirm patient has an appointment. Press <Return> again confirm MEPRS Code of BHAA.

Enter the prompts as follow:

ACTION: **NEW**
Associate outpatient orders with NEW appointment in GENERAL MEDICINE CLINIC 21 Jun 2001@0900? YES// <Return>
ORDER TYPE: **LAB**

CHOOSE DEFAULTS, or Press Return for Full Screen Entry (required for Anatomic Pathology, Blood Bank, and all Continuous lab tests.)

DATE/TIME OF TEST (NOW, AM QAM or Date&Time): **<Return>**

Select LABORATORY TEST: **AUTOL**

1AUTOLOGOUS DONATION

```
        NORRIS,LINDA        Age:28      20/222-33-4483      Laboratory Order
        AUTOLOGOUS DONATION            Pt/222-33-4883          010621-03256
        ==================================================================
                       Date/Time Needed:  21 Jun 2001@0917
                       Start Date/Time:   21 Jun 2001@0917

                  Reason for Transfusion/Diagnosis/Procedure:

              Location of Intended Transfusion/Procedure (free text):
                                      10A
        Product Type                                               Units
           WHOLE BLOOD, AUTOLOGOUS                                   2
           RED BLOOD CELLS, AUTOLOGOUS                               1

           ----------------------------------------------------------------
                          File/exit     Abort     Edit
                             File changes and exit.
```

There are details which should be pointed out while demoing blood lab orders.

-All blood lab orders and autologous donations are to be done using Full Screen Method, only.

-The *Hospital Location of Transfusion/Procedure* field is a required field and will accept an entry from the Hospital Location file.

-A maximum of four Product types is allowed. A picklist is displayed when ?? is entered in this field.

-The *Reason for Transfusion/diagnosis/Procedure:* prompt will allow user to enter a reason for why the blood product is needed, the working diagnosis of the patient, or the type of procedure which may require a transfusion. This field is limited to 60 characters.

-Explain that a TYPE AND CROSS blood lab order is used to identify whether patient is A or B or AB or O.

-Explain that a TYPE AND SCREEN blood lab order is used to determine the pH factor.

-Autologous donations may be ordered for a patient, so that the patient may donate their own blood such as for a surgical procedure which has been scheduled in the near future.

-Note that all blood lab orders will be flagged as priority results when using the Review New Results option.

NOTE: It is important to point out in V4.5 that during an order entry session the system will prompt user to link those orders to an appointment for that patient. See Section 3.6.2 of this IUG for more detail.

E.5 LINKING ORDERS TO APPOINTMENTS (WAM).

```
                         DATA:
Logon:  Access/Verify Codes = DRLAMP/DRLAMPV
             Patient: NATHAN,LINDA
         Requesting Location:  BHAA
```

a.Linking Orders to the Default Appointment

Enter the prompts as follows:

```
Select Physician Menu Option: ORE
Select PATIENT NAME: NATHAN,LINDA
Select REQUESTING LOCATION: BHAA
```

From the POL, enter the prompts as follows:

```
                    ACTION: N
Associate outpatient orders with NEW appointment in GENERAL MEDICINE
        CLINIC 21 Jun 2001@0830?  YES// <Return>
                  ORDER TYPE: LAB
```

CHOOSE DEFAULTS, or Press Return for Full Screen Entry (required for Anatomic Pathology, Blood Bank, and all Continuous lab tests.)

```
DATE/TIME OF TEST (NOW, AM, QAM or Date&Time): NOW
Collection Method: SEND PATIENT TO LAB// <Return>
     COLLECTION PRIORITY: ROUTINE// <Return>
     PROCESSING PRIORITY: ROUTINE// <Return>
          ORDER COMMENT: <Return>
```

Select LABORATORY TEST: **UA**

Select LABORATORY TEST: **CBC**

Select LABORATORY TEST: **GLU**

Press <Return> two more times to come back into POL. Then type **Q** to QUIT AND ACTIVATE orders at ACTION prompt in the POL. Print order group (site policy) to a printer named at the DEVICE prompt.

b.Linking Orders to an Appointment in a Picklist

Enter the prompts as follow:

```
Select Physician Menu Option: ORE
Select PATIENT NAME: SHAW,ALLAN
Select REQUESTING LOCATION: BHAA
```

From the POL, enter the prompts as follow:

ACTION: **NEW**

NOTE: If there is no current appointment, a picklist of appointments will appear on screen from two weeks in the past to two weeks in the future.

Scheduled Appointments for SHAW,ALLAN A

Use SELECT key to choose an appointment to link with orders
Date/TimeClinic/DivHCPTypeStatusReason
+---+
        21Jun@0700ACARDI/DIVCALDWELL,LORRAINE CNEWPENDINGCHECKUP
        21Jun@1030ER01/DIVAEROOMWALK-INMIGRAINE
        21Jun@1030ER2/DIVAEROOMWALK-INMIGRAINE
        21Jun@1030ER3/DIVAEROOMWALK-INDIG LEVEL
        21Jun@1030ER4/DIVAEROOMWALK-INMIGRAINE
        21Jun@1030ER5/DIVAEROOMWALK-INSHOTS
        21Jun@1030ER6/DIVAEROOMWALK-INTESTS
        21Jun@1030ER7/DIVAEROOMWALK-INMIGRAINE
        21Jun@1030ER8/DIVAEROOMWALK-INCAST
        21Jun@1030ER9/DIVAEROOMWALK-INWORKUP
        21Jun@1030ER10/DIVAEROOMWALK-INMIGRAINE
      21Jun@1500ACARDI/DIVCALDWELL,LORRAINE CNEWPENDINGF/U
      21Jun@1700ACARDI/DIVCALDWELL,LORRAINE CDAPTPENDINGF/U

+---+
                  Search   Help   eXit
      Enter a new date range to search for more patient appointments.

The **S**earch will allow user to enter a date range to search for more
patient appointments. **H**elp option will provide additional online help
   and the e**X**it option will allow user to exit from screen once the
                   appointment has been selected.

    Use the Up Arrow or Down Arrow keys to scroll to the appropriate
  appointment. Use **<Select>** key to select the that appointment and
                        press **<Return>**.

    Continue entering orders as outlined in *1. Linking Orders to the
  Default Appointment* section. Press <Return> two more times to come
   back into POL. Then type **Q** to QUIT AND ACTIVATE orders at ACTION
            prompt. Print the order group, if desired.

   There are details which should be pointed out while demoing linking
                orders to an appointment out of a picklist:

   -The user may use the expand key **F9** next to the appointment in the
            picklist to display the reason for an appointment.

 -Orders which are linked to an appointment on the outpatient page will
   remain linked to that appointment when those orders are modified,
             renewed, or reactivated in the future.

     -Orders linked to appointments will provide data for workload
                         reporting.

                c.Unlinking Orders from an Appointment

                 Enter the prompts as follows:

             Select Physician Menu Option: **ORE**

Select PATIENT NAME: **NATHAN,LINDA**
Select REQUESTING LOCATION: **BHAA**

From the POL, enter the prompts as follows:

ACTION: **UNLK**

```
 NATHAN,LINDA L          Age:42   20/222-33-4560       OUTPAT UNLINK ORDERS
 -----------------------------------------------------------------------------
            Use SELECT key to choose an appointment to unlink with orders
   +-----------------------------------------------------------------------+

      KEPT NEW APPT in GENERAL MEDICINE CLINIC DIV A - TRAINING HOSPITAL with
                    DOCTOR,LAMP on 21 Jun 2001@0830
         ----------------------------------------------------------------------
                 1 LAB  URINALYSIS~SEND PATIENT TO LAB~URINE  on 21
            Jun 2001@1520 . . . . . . . . . . . . .        DRLAMP   21JUN@1520
                 2 LAB  CBC PROFILE~SEND PATIENT TO LAB~BLOOD~LAV
            on 21 Jun 2001@1520 . . . . . . . . . .        DRLAMP   21JUN@1520
                 3 LAB  GLUCOSE~SEND PATIENT TO LAB~BLOOD~MARB/RED
            on 21 Jun 2001@1520 . . . . . . . . . .        DRLAMP   21JUN@1520
                 4 LAB  CHEM 7~SEND PATIENT TO LAB~BLOOD~MARB/RED
            on 21 Jun 2001@1520 . . . . . . . . . .        DRLAMP   21JUN@1520


   +-----------------------------------------------------------------------+
               Search   uNlink   Transfer   Help   eXit
            Enter a new date range to search for more patient appointments.
```

Once the selected appointments have been unlinked, the system will
highlight the eXit option in the Action Bar. Press <Return> to exit.
Type **Q** to exit from the POL.

Point out that the system allows the user to unlink appointments in
case the orders are entered in error, i.e., for the wrong patient or
the wrong orders for that patient, etc. The orders that are unlinked
may also be reassigned to another appointment, if needed.

d. Transferring Unlinked Orders to Another Appointment

Enter the prompts as follow:

Select Physician Menu Option: **ORE**
Select PATIENT NAME: **SHAW,ALLAN**
Select REQUESTING LOCATION: **BHAA**

From the POL, enter the prompts as follows:

ACTION: **UNLK**

The next screen will display all orders linked to the current
appointment. Use **<Select>** key to choose orders to be transferred and
press highlighted/capitalized letter "**T**". The system will unlink the
selected orders and display the picklist of appointments from which to
make another appointment selection.

Once the appointment has been selected the system will link (re-assign) the orders to that selected appointment.

E.6 DIETETIC/MED AND DIETETIC/LAB REPORTS.

NOTE: This module is only for sites with the CHCS Dietetics System for inpatients.

a.Medications of Interest Report

1.Creating the Medications of Interest Report

Log on using access/verify codes of DTSDMF/DTSDMFV.

Menu path: DM --> AD --> CM

Enter the list of medications in the "MEDICATIONS:" field as needed. File the screen when completed. At the prompt "**Do you want a printout of the list? NO//**", either press <Return> for default of No or type "Y" for Yes.

2.Printing the Medications of Interest Report

Menu Path: OF --> PM

The system will bring up a picklist of all wards and prompts the user to select wards for printing the report. Or the user can press the '**F17**' key to print all wards. The system will then prompt to print each ward information on a separate page. If you type '**NO**', the report will print using the standard page breaks rather than per ward.

Point out the following:

-The medications identified for tracking will be flagged in the Pharmacy files so that if a provider orders one these drugs, that patient will automatically appear on the 'Medications of Interest' report when printed.

-The purpose of the Medications of Interest' report is to provide a list of patients who are taking medications flagged in the list so that the appropriate dietary counseling may be provided for the patients.

-Once the Medications of Interest list is created, it can then be added to, updated or items deleted as needed.

b.Abnormal Clinical Chemistries of Interest Report

1.Creating the Abnormal Clinical Chemistries of Interest Report

Log on using access/verify codes of DTSDMF/DTSDMFV.

Menu path: DM --> AD --> CC

Enter the list of lab tests in the "CLINICAL CHEMISTRY" field as needed. File the screen when completed. At the prompt "**Do you want a printout of the list? NO//**", either press <Return> for default of No or type "Y" for Yes.

2.Printing the Abnormal Clinical Chemistries of Interest Report

Menu Path: OF --> PC

The system will bring up a picklist of all wards and prompts the user to select wards for printing the report. The user may press the 'F17' key to select all wards. The system will then prompt to print each ward information on a separate page. If you type '**NO**', the report will print using the standard page breaks rather than per ward.

Point out that:

-The Clinical Dieticians will create a list of lab tests for tracking purposes. If a patient's result is abnormal for any tests on that list, that patient's name will appear in the report for Abnormal Clinical Chemistries of Interest.

-The report will enable the Clinical Dieticians to provide appropriate dietary counseling and modify a patient's dietetic needs based on the information identified.

-Patients will be removed from the list at the time they're dispositioned from the MTF and/or there are no longer any abnormal results for the lab tests indicated.

-Once the Abnormal Clinical Chemistries of Interest list has been created, it can then be added to, deleted from or updated as needed.

This page
has been left blank
intentionally.

****

APPENDIX F:

SAMPLE REPORTS

****

This page
has been left blank
intentionally.

LAB DUE LIST REPORT

LOC: 10A   FROM: 21 Jun 2001@0700
PRINT DATE: 21 Jun 2001@1021   TO: 21 Jun 2001@1459
_____
                              21 Jun 2001
                                 0800
           1001-B KAGAN,CHARLES C [AE3] 20/300-30-6711 REG#
        1. GLUCOSE~LAB COLLECT....................................MT 21@0800
                                                        LAB LOGGED IN

           1002-A KAGAN,BARBARA B [FE1] 20/300-30-6611 REG#
        1. CHEM 7~SEND PATIENT TO LAB~BLOOD~MARB/RED..............PENDING

           1004-A KAGAN,FLORENCE F [FO3] 20/300-30-7011 REG#
        1. PROTEIN,TOTAL~WARD/CLINIC COLLECT~BLOOD~MARB/RED.......PENDING

           1004-B KAGAN,HOLLEY H [NO3] 20/300-30-7211 REG#
        1. URINALYSIS~WARD/CLINIC COLLECT~URINE...................PENDING
        2. CBC & DIFF~WARD/CLINIC COLLECT~BLOOD~LAV...............PENDING

           1005-B KAGAN,GEORGE G [AO3] 20/300-30-7111 REG#
        1. CBC & DIFF~LAB COLLECT.................................MT 21@1100
                                                        LAB CANCELLED:
                                                          QUANTITY NOT
                                                            SUFFICIENT

           1007-A KAGAN,EARL E [AE3] 20/300-30-6911 REG#
        1. PROTEIN,TOTAL~WARD/CLINIC COLLECT~BLOOD~MARB/RED.......PENDING

           1007-B KAGAN,ALLAN A [AE3] 20/300-30-6511 REG#
        1. CHEM 7~SEND PATIENT TO LAB~BLOOD~MARB/RED..............PENDING

                                 PRN
           1005-B KAGAN,GEORGE G [AO3] 20/300-30-7111 REG#
         1. GLUCOSE~WARD/CLINIC COLLECT~BLOOD~MARB/RED.............
            FOR SIGNS OF HYPOGLYCEMIA

                            End of Report
              Personal Data - Privacy Act of 1974 (PL-93-579)

RAD DUE LIST REPORT

Rad Due List

LOC: 10A   FROM: 21 Jun 2001@0700
PRINT DATE: 21 Jun 2001@0933   TO: 21 Jun 2001@1459

_____
21 Jun 2001
1001-B KAGAN,CHARLES C [AE3] 20/300-30-6711 REG#
 1. ANKLE, RT~MAIN RADIOLOGY~AMB.........................MT 21@1523
                                                   ARRIVED IN RAD

1005-B KAGAN,GEORGE G [AO3] 20/300-30-7111 REG#
  1. FEMUR, RT~MAIN RADIOLOGY~WHEELCHAIR...................NOT DONE
     R/O FX   ARRIVAL ERROR

End of Report
Personal Data - Privacy Act of 1974 (PL-93-579)

MEDICATIONS OF INTEREST REPORT

```
                    * * * MEDICATIONS OF INTEREST * * *
                              All Wards

-------------------------------------------------------------------------
     Patient Name          Room-Bed      Diet    Med     Medications
                                                           Date*
-------------------------------------------------------------------------
                              Ward: 10A

   KAGAN,BARBARA B         1002-A                21Jun01  ACETAMINOPHEN--PO

                              Ward: 10D

   ZACHS,ALLAN A           1025-B                21Jun01  ACETAMINOPHEN--PO
   ZACHS,BARBARA B         1026-B                21Jun01  ACETAMINOPHEN--PO

                              Ward: 10M

   KAPLAN,ALLAN A          1065-A                21Jun01  ACETAMINOPHEN--PO
   KAPLAN,BARBARA B        1066-A                21Jun01  ACETAMINOPHEN--PO

                              Ward: 10N

   KEENAN,BARBARA B        1073-B                21Jun01  ACETAMINOPHEN--PO

                              Ward: 1B

   GABLE,ARTHUR            111-C                 21Jun01  ACETAMINOPHEN--PO


-------------------------------------------------------------------------
            *Med Date - The start date of the medications
                        *** End of Report ***
```

ABNORMAL CLINICAL CHEMISTRIES OF INTEREST REPORT

```
TRAINING MEDICAL TREATMENT FACILITY                21 Jun 2001    Page 1
                Personal Data - Privacy Act of 1974 (PL 93-579)

             * * * ABNORMAL CLINICAL CHEMISTRIES OF INTEREST * * *
                               All Wards
```

Patient Name	Room-Bed	Date of Results	Test Results		Clinical Chemistries

----

```
                              Ward: 10D

   ZIMMERMAN,THOMAS       1028-B      16Jun01  H     110.00 U/L         CPK

                              Ward: 3D

   ZELLER,ALLAN A          325-A      18Jun01  H     156.00 U/L         CPK

                              Ward: 5B

 ZINN,MICHAEL              509-A      19Jun01  H      5.20 mEq/L      POTASSIUM

                              Ward: 8D

 FREESE,ALLAN A            825-A      20Jun01  L      3.00 mEq/L      POTASSIUM
```

```
H* - Critical High   H - High    L - Low   L* - Critical Low   /A - Amendment
                          *** End of Report ***
```

****

APPENDIX G:

SIRS/SCRS

****

This page
has been left blank
intentionally.

The following is a list of selected 4.5 SIRs to note for their user impact:

SIR #: BRIEF DESCRIPTION:

12957PRN Lab orders are no longer allowed on the outpatient page.

13578Inpatient function: On disposition order, the system no longer allows entry of certain inappropriate disposition types. An active duty patient may not be discharged home. A Retired status patient may not have an entry of "RETURN TO DUTY."

14535Order sets: Problems with IV orders on order sets have been corrected. Orders which cannot be ordered "quick" can no longer be defined as quick orders in an order set.

19375VS on Due Lists: Vital signs results on due lists have been re-formatted to prevent information from truncating.

20987Diets on Due Lists: Corrections were made so that modified diet orders now appear correctly on the due list.

21489Allergy warning checks on MED and RX order types have been corrected. Allergies may be entered into the system AFTER a drug order applying to the allergy was already entered. Now the system will produce a clinical screening when that drug is modified or renewed. If, however, the warning is overridden, the next modification or renewal will not produce a screening.

22786A problem with lab orders expiring inappropriately has been fixed. A ONE TIME order will now be a standing order and not expire. Previously, lab orders not accessioned would expire based on the clinical site parameter for default duration of a continuous order. This was not working as designed and has been corrected. (NOTE: this was applied as a QF in Versions 4.3 MU1/MU2 and 4.4).

23967Users can now enter a decimal for the duration field on NRS and IVF order types. (Quick Fix)

This page
has been left blank
intentionally.